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FINAL

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**Record of Decision for Soil at the T-25 Area, Building 14 and Former Building 13,
and Boiler Plant – Operable Unit 4**

**U.S. ARMY NATICK SOLDIER SYSTEMS CENTER
NATICK, MASSACHUSETTS**



Prepared for:

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NATICK, MASSACHUSETTS**

September 2008

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**U.S. ARMY NATICK SOLDIER SYSTEMS CENTER
NATICK, MASSACHUSETTS**

Prepared for:

**U.S. ARMY NATICK SOLDIER SYSTEMS CENTER
Natick, Massachusetts**

Prepared by:

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September 2008

**Project 095220.0.092
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ACRONYMS

ACEC	Area of Critical Environmental Concern
ADL	Arthur D. Little, Inc.
Argonne	Argonne National Laboratory
bgs	below ground surface
BTEX	Benzene, Ethylbenzene, Toluene, and Xylenes
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	Code of Federal Regulations
COC	Contaminant of Concern
CPF	Cancer Potency Factor
CSF	Cancer Slope Factor
ERA	Ecological Risk Assessment
EPH	Extractable Petroleum Hydrocarbon
ES	Environmental Screening
ESI	Expanded Site Investigation
FS	Feasibility Study
HEAST	Health Effects Assessment Summary Table
HHRA	Human Health Risk Assessment
HI	Hazard Index
HLA	Harding Lawson Associates
HQ	Hazard Quotient
ICF	ICF International
IRA	Immediate Response Action
IRIS	Integrated Risk Information System
LNAPL	Light Non-aqueous Phase Liquid
MACTEC	Mactec Engineering and Consulting, Inc.
MADEP	Massachusetts Department of Environmental Protection
MCP	Massachusetts Contingency Plan
MEP	Master Environmental Plan
µg/kg	micrograms per kilogram
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
msl	mean sea level
NCP	National Contingency Plan
NERI	Northeast Research Institute
NRDEC	U.S. Army Natick Research, Development and Engineering Center
NPL	National Priorities List
NSSC	U.S. Army Natick Soldier Systems Center

OU	Operable Unit
PAH	Polynuclear Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethylene
ppm	parts per million
PRG	Preliminary Remediation Goal
RAM	Release Abatement Measure
RBC	Risk-based concentration
RC	Reportable Concentration
RCRA	Resource Conservation and Recovery Act
RfC	Reference Concentration
RfD	Reference Dose
RI	Remedial Investigation
ROD	Record of Decision
SARA	Superfund Amendments and Authorization Act of 1986
SI	Site Investigation
SSC	U.S. Army Soldier Systems Center
SVOCs	Semivolatile Organic Compound
TCE	Trichloroethylene
TPH	Total Petroleum Hydrocarbons
TRPH	Total Recoverable Petroleum Hydrocarbons
USAEC	U.S. Army Environmental Center
USATHAMA	U.S. Army Toxic and Hazardous Materials Agency
US EPA	U.S. Environmental Protection Agency
UST	Underground Storage Tank
VOCs	Volatile Organic Compound
VPH	Volatile Petroleum Hydrocarbon

PART 1: THE DECLARATION

1.0 SITE NAME AND LOCATION

U.S. Army Natick Soldier Systems Center
Kansas Street
Natick, Massachusetts

Area of Concern: T-25 Area

Site Screening Areas: Building 14 and Former Building 13, and Boiler Plant

The U.S. Army Natick Soldier Systems Center (NSSC, the "Site") is an active Army installation that was placed on the National Priorities List (NPL) in May 1994. An August 2006 Federal Facility Agreement between the U.S. Department of the Army and the U.S. Environmental Protection Agency (US EPA) identified eight Areas of Concern and three Site Screening Areas at NSSC. This Record of Decision (ROD) applies to the soil within Operable Unit 4 which includes the T-25 Area of Concern, the Building 14 and Former Building 13 Site Screening Area, and the Boiler Plant Site Screening Area. The U.S. Department of the Army is the lead agency for cleanup activities at NSSC. The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) ID number for the Site is MA1210020631.

2.0 STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected remedial actions for the soil at the T-25 Area, Building 14 and Former Building 13, and the Boiler Plant (Operable Unit 4) at NSSC, in Natick, Massachusetts. These areas were chosen in accordance with the Comprehensive Environmental Response, Compensation and Liability Act of 1980, (CERCLA), 42 United States Code §9601 *et seq.*, as amended by the Superfund Amendments and Authorization Act of 1986 (SARA), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300, as amended. The Selected Remedy is No Further Action, which is described in detail in Section 3.0 (Description of the Selected Remedy) of this Record of Decision. The Garrison Commander, U.S. Army Garrison, Natick and the Director of the EPA Region 1 (New England) Office of Site Remediation and Restoration have been delegated the authority to approve this ROD.

This decision was based on the Administrative Record, which has been developed in accordance with Section 113(k) of CERCLA, and is available for review at NSSC and the Morse Institute Library located in Natick, Massachusetts. The Administrative Record Index, located in Appendix B, identifies each of the items comprising the Administrative Record upon which the selection of the remedial action is based.

A letter of concurrence from MADEP is included in Appendix A.

3.0 DESCRIPTION OF THE SELECTED REMEDY

The selected remedy for the soil at the T-25 Area, Building 14 and Former Building 13, and Boiler Plant (Operable Unit 4) is No Further Action.

In this context, No Further Action means that no further CERCLA remedial action will be taken with respect to the soil at the T-25 Area; no further CERCLA remedial action is necessary for soil at Building 14 and Former Building 13; and no further CERCLA remedial action is necessary for soil at the Boiler Plant.

4.0 STATUTORY DETERMINATIONS

The selected remedy abides by the mandates of CERCLA and the regulatory requirements of the NCP.

No further CERCLA remedial action is necessary for the T-25 Area soils. The Human Health Risk Assessment (HHRA) conducted for the T-25 Area soil in the 1998 Phase II Remediation Investigation (RI) and the subsequent risk evaluation in the Supplemental RI completed in 2008, concluded that estimated cancer and non-cancer risks for all potentially exposed populations were below or within levels considered acceptable by US EPA. After a soil removal action in 1997 at the Storage Area (within the T-25 Area), estimated human health risks for the Storage Area soils were also below or within levels considered acceptable by US EPA. Contaminated ground water associated with the T-25 Area is being captured and treated as part of the T-25 Area ground water extraction and treatment system, being managed under independent agreements. No site-related hazardous substances, pollutants, or contaminants remain in soil at the T-25 Area above levels that allow for unlimited use and unrestricted exposure. Therefore, no statutory five-year review is required for the T-25 Area soil by the NCP (40 Code of Federal Regulations 300.430(f)(4)(ii)).

No further CERCLA remedial action is necessary for soil at Building 14 and Former Building 13. A previous response action completed in 2007 eliminated the need to conduct further remedial action for soil contamination. Contaminated ground water in this portion of the NSSC facility is associated with the T-25 Area, and is being captured and treated as part of the T-25 Area ground water extraction and treatment system, being managed under independent agreements. No site-related hazardous substances, pollutants, or contaminants remain in soil at Building 14 and Former Building 13 above levels that allow for unlimited use and unrestricted exposure. Therefore, no statutory five-year review is required for Building 14 and Former Building 13 by the NCP (40 CFR 300.430(f)(4)(ii)).

No further CERCLA remedial action is necessary for soil at the Boiler Plant. Previous response actions completed in 1990, 1995, and 2001 eliminated the need to conduct further remedial action for soil contamination. No site-related hazardous substances, pollutants, or contaminants remain in soil at the Boiler Plant above levels that allow for unlimited use and unrestricted exposure. Therefore, no statutory five-year review is required for the Boiler Plant by the NCP (40 CFR 300.430(f)(4)(ii)).

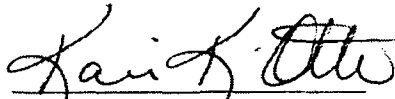
5.0 AUTHORIZING SIGNATURE

This Record of Decision documents the selection of a remedial action for soil at the T-25 Area, Building 14 and Former Building 13, and the Boiler Plant (Operable Unit 4) by the U.S. Department of the Army and the U.S. Environmental Protection Agency, with the concurrence of the Commonwealth of Massachusetts Department of Environmental Protection.

Concur and recommended for immediate implementation:

U.S. DEPARTMENT OF THE ARMY

By:



Karl K. Otto
Lieutenant Colonel, U.S. Army
Commanding

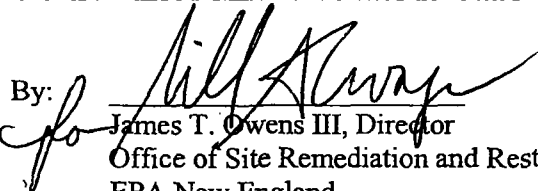
Date:

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Concur and recommended for immediate implementation:

U.S. ENVIRONMENTAL PROTECTION AGENCY

By: 

James T. Owens III, Director
Office of Site Remediation and Restoration
EPA New England

Date: 9-26-08

PART 2: THE DECISION SUMMARY

6.0 SITE NAME, LOCATION, AND BRIEF DESCRIPTION

U.S. Army Natick Soldier Systems Center
Kansas Street
Natick, Massachusetts

Area of Concern: T-25 Area Soil

Site Screening Areas: Building 14 and Former Building 13, and Boiler Plant

The U.S. Army Natick Soldier Systems Center (NSSC) is an active research and testing facility, owned and operated by the Federal government through the Department of the Army. NSSC is located approximately 17 miles west-southwest of Boston in the Town of Natick, Middlesex County, Massachusetts (Figure 6-1). NSSC has been a permanent Army installation since October 1954, and its mission includes research and development activities in food engineering; food science; clothing, equipment, and materials engineering; and aero-mechanical engineering. The Site occupies a 74-acre area on a small peninsula extending from the eastern shoreline of South Pond Lake Cochituate.

The land surrounding NSSC includes residential, commercial/retail, and light industrial areas. The ground water beneath the Site is designated as a Zone II Wellhead Protection Area for the Town of Natick Springvale Municipal Water Supply Well Field (Springvale Well Field). With the exception of NSSC (including military housing on Heritage Lane) and the Lakeview Garden Apartments on Kansas Street and Second Street, the area between North Main Street, Kansas Street, and South Pond Lake Cochituate is not served by public sewer. The areas not served by public sewer are upgradient of the Site, and the numerous residences that use septic tanks and leach fields for domestic wastewater treatment and disposal are not expected to be impacted by NSSC.

The T-25 Area is a 15.6-acre, rectangular plot located in the northwestern portion of the NSSC facility (Figure 6-2). The area is mostly covered with buildings or paved with asphalt. The largest unpaved portion of the T-25 Area is a baseball field in the northwest corner. The area is circled by an unpaved road on an earthen embankment, which is elevated between 5 and 10 feet above the rest of the site. The embankment rises an additional 10 feet above the dirt road and is topped with a chain link fence on the west, north, and east, where the T-25 Area abuts residential areas. To the south lies the rest of the NSSC facility.

Building 14 and the site of former Building 13 (Figure 6-3) are located in the western portion of NSSC, approximately 200 to 300 feet from the South Pond of Lake Cochituate. Building 14 consists of a two-story concrete structure measuring 50 feet wide by 135 feet long and is located upon a filled and re-graded former gravel pit that was owned and operated by the town of Natick. Building 13, a former classified paperwork incinerator, was located to the east of Building 14 until the late 1990s when it was demolished, leaving the elevated concrete foundation in its entirety until 2007 when a portion of it was removed during a removal action. The Building 14 and former Building 13 area is bordered to the north by Buildings 20 and 83, underground diesel and gas

storage tanks, and a vehicle fuel dispensing station; to the east by Building 73; to the south by Building 15 and an asphalt covered parking area; and to the west by a steep slope and property fence line that marks the NSSC facility boundary.

The Boiler Plant area is located in the southwest portion of the NSSC facility (Figure 6-4). It covers 1.8 acres and is located on a small south-facing peninsula on the South Pond of Lake Cochituate. The site includes the Boiler Plant (Building 19), the former Building 23 area, and a former piggery. Building 19 is located on a steep hillside; the basement floor of the building is below ground surface on the north side of the building, and is level with ground surface on the south side. Former Building 23 was a 12-foot by 12-foot steel-framed metal building located on the shore of the South Pond of Lake Cochituate southwest of Building 19. The former piggery was located in what is now the parking area, also located southwest of Building 19. The Boiler Plant area is bordered to the north by C Street, to the east by Building 22, to the west by a parking area, and to the south by another parking area and the South Pond of Lake Cochituate.

For a more complete description of the T-25 Area, Building 14 and Former Building 13, and Boiler Plant, please reference Sections 2, B-7 and B-8, and B-4, respectively, of the *First Five-Year Review Report for U.S. Army Soldier Systems Center (SSC), Town of Natick, Middlesex County, Massachusetts* (ICF, 2007).

7.0 SITE HISTORY AND ENFORCEMENT ACTIVITIES

This section summarizes site history, removal actions, and enforcement actions for soil at the T-25 Area, Building 14 and Former Building 13, and Boiler Plant.

7.1 HISTORY OF SITE ACTIVITIES

Prior to Army development in the 1950s, the T-25 Area was a gravel pit owned by the Town of Natick, subsequently filled with soil and construction debris to accommodate development. Between 1970 and 1989, the T-25 Area was used to store bulk waste and drums of petroleum, solvents, antifreeze, trichlorofluoroethane, and pesticides. After contamination was discovered in 1989, the area was remediated and repaved, and the storage area was moved to indoor storage structures (Argonne, 1993). Past and present operations within the T-25 Area have included: quarrying; indoor and outdoor storage of bulk items, wastes, petroleum, solvents, antifreeze, pesticides, and Freon 113; warehouse operations (shipping and receiving); laboratory research, including the testing of petroleum, oil and lubricant pumping equipment, refrigeration units, and various types of fuel in engines; clothing and textile research; drop-testing; waste incineration; and garage operations, including spray painting, vehicle maintenance, insect and rodent control, metal parts and brush cleaning, battery charging, silk screening, and rubber adhesive thinning. Future land use is expected to remain consistent with current use.

Building 14 and former Building 13 were both constructed in 1954. Building 14 has been used both currently and historically for vehicle and equipment maintenance, administrative space, and storage. Building 13 was used as an incinerator for destroying classified paperwork from its installation until its closure in 1985 and the area was also used to decontaminate pesticide equipment and to clean garbage cans. The aboveground structure and stack were removed in the

late 1990s leaving the concrete foundation, which was partially removed in 2007 during a remedial action. Currently, there are two 2,000-gallon underground storage tanks (UST) (one gasoline and one diesel) located to the northeast of Building 14 where vehicle refueling occurs.

The Boiler Plant (Building 19) remains in operation and is used to generate heat for NSSC buildings. From 1950 until 1982, the room in the southwestern corner of the basement of Building 19 was used as a pesticide storage and mixing area. A leach field was also present to the south of Building 19. Building 23 was a former pump house (removed in 2001) that was constructed to supply water to the boiler plant. The former piggery was located southwest of Building 19 and was used for housing and feeding pigs used at NSSC for research.

7.2 HISTORY OF INVESTIGATIONS AND REMOVAL/REMEDIAL ACTIONS

The following subsections summarize the investigative and cleanup history of the T-25 Area.

7.2.1 History of Investigations and Removal Actions at the T-25 Area

1980 Installation Assessment. The Installation Assessment was performed by the U.S. Army Environmental Center (USAEC) to determine whether the use, storage, treatment, and disposal of toxic and hazardous materials at NSSC had resulted in environmental degradation, and to identify conditions that may adversely affect public health or the environment. The assessment included a review of records, interviews with current and former employees, and a tour of the installation (USATHAMA, 1980).

1989 to 1992 Soil Gas Surveys. An initial soil gas survey was performed by New England Research Institute (NERI) around the T-25 Area building after an oil-like sheen was observed on the surface of stormwater runoff during rain events (NERI, 1989). In 1990, a second soil gas survey was performed by NERI on the entire T-25 Area (NERI, 1990). A third survey in 1992 was performed as part of a larger data collection for the Expanded Site Investigation (ESI) (USATHAMA, 1992).

1991 Pit Waste Oil Storage Tank Removal. During the removal of a 1,000-gallon waste oil underground storage tank, stained soil was observed in the U.S. Army Natick Research, Development and Engineering Center (NRDEC) 04 Pit Waste Oil Storage Tank Area (Argonne, 1993). Total petroleum hydrocarbon (TPH) levels detected during tank excavation ranged between 172 and 1,670 mg/kg, with the highest levels directly below the tank and extending (at lower concentrations) to 9 feet below the tank (Argonne, 1993). Soil was also screened for mercury vapor, which was not detected. Benzene, toluene, ethyl benzene, and xylene were also detected above background concentrations in soil gas (NERI, 1989, 1990). In 1992, chlordane (99.4 mg/kg) was detected in a sample from 0 to 2 feet below ground surface (bgs), and polynuclear aromatic hydrocarbons (PAHs) (6.1 mg/kg) were detected in the 5 to 7 bgs sample (Dames & Moore, 1992). The area was paved following the removal action.

1994 Placement of Site on NPL: NSSC, then known as the Natick Laboratory Army Research, Development, and Engineering Center, was officially added to the Superfund NPL, as a result of

ground water contamination found beneath the T-25 Area and its location relative to the town of Natick Springvale Well Field.

1992 – 1995 Phase I Remedial Investigation. The Phase I RI was conducted between 1992 and 1995, and the final report was completed in 1996 (ADL, 1996). In 1992, chlordane was detected at a concentration of 99 mg/kg in a surface soil sample (0 to 2 feet bgs) in the Storage Area, and at a concentration of 13.3 mg/kg in a subsurface soil sample (5 to 7 feet bgs) at the same location (ADL, 1996). Located centrally within the T-25 Area, the former Chlordane Storage Area was open, sparsely vegetated, unpaved, and approximately 2,400 square feet in size, and was used for outdoor storage of bulk waste, including chlordane. The Phase I RI recommended further investigation of the nature and extent of pesticide contamination in the Storage Area.

1995 – 1998 Phase II Remedial Investigation and Feasibility Study. The Phase II RI, completed in December 1998, used data collected between 1993 and 1998, and included the analysis of soil samples. Six shallow soil borings were advanced and additional surface soil samples were collected in the Storage Area in 1995 and 1996 (ADL, 1996). The soil borings were advanced within the unpaved portion of the Storage Area, and the surface samples were collected within the unpaved area, grassy area, and asphalt-paved area (east of the tennis court). Based on the data collected, chlordane concentrations exceeded the 1995 Massachusetts Contingency Plan (MCP) S-2 and S-3 standards at depths greater than 3 feet. From 0 to 3 feet, chlordane, DDT, DDD, and five PAH concentrations exceeded the MCP S-2 standard (ICF, 2007).

As part of the Phase II RI and Feasibility Study (FS), human health risks associated with current and future exposure to the Storage Area soils were evaluated. Because a removal action was planned for the Storage Area soils, the only exposure pathways considered were for future construction workers and nearby residents potentially exposed to windblown dust. The estimated risks associated with potential exposures to the surface or subsurface contaminated soils were below the range considered safe by EPA for both cancer and non-cancer risks (ADL, 1998). However, when evaluated with MCP Method 1 S-2 and S-3 standards, Storage Area soil concentrations of chlordane, DDT, and DDD exceeded acceptable health risks for medium to low potential for human exposure.

The Phase II RI also evaluated ecological risks in the T-25 Area (ADL, 1998). No significant ecological risks were identified in the surface soils of the T-25 Area ballfield or adjacent areas. Calculated Storage Area soil risks, which were elevated above background risks, were deemed ecologically insignificant due to their highly localized nature, and food-chain-mediated ecological risks were considered insignificant.

1997 Storage Area Time Critical Soil Removal Action. The Storage Area soil removal action, approved by EPA Region 1 and MADEP in 1996, was performed between October and December 1997 (Figure 7-1). The action resulted in the removal of approximately 1,380 tons of contaminated soil from the Storage Area and the east side of the tennis courts (Weston, 1999), and excavated to depths between 1 and 10 feet bgs.

Initial confirmatory samples from the sidewalls and bottom of the excavated area indicated that DDT and DDD concentrations remained higher than site cleanup action levels (MCP Method 1

standards of 2 mg/kg for DDT and DDD and 1 mg/kg for chlordane at that time). Confirmatory soil samples were collected after additional excavation, revealing pesticide concentrations below action levels. DDT, DDE, and DDD were detected below 1 mg/kg, which is substantially below both the MCP S-1/GW-1 cleanup standard of 2 mg/kg at that time and the current MCP S-1/GW-1 standards for DDT (3 mg/kg), DDE (3 mg/kg), and DDD (4 mg/kg). Chlordane concentrations were considerably below both the 2005 MCP S-1/GW-1 standard (1 mg/kg) and the current MCP S-1/GW-1 standard (0.7 mg/kg).

Excavated soil was transported to Plainville Laidlaw Landfill in Plainville, Massachusetts on December 4, 5, and 8 in 1997 as non-hazardous/non-RCRA (Resource Conservation and Recovery Act) waste. After contaminated soils were removed, the Storage Area was backfilled with clean soil, compacted, and paved (Weston, 1999). During site restoration and cleanup, an additional 3,000 pounds of soil that was assumed to be contaminated was drummed and transported as non-regulated material to Pollution Control Industries in East Chicago, Indiana on December 10, 1997. This time-critical removal action was consistent with the NCP, as site conditions met the criteria (40 CFR 300.415) for removal action. The removal action eliminated contaminant sources and thus provides a long-term solution for the Storage Area site (Weston, 1999).

2001 Acceptance of the Groundwater Pump and Treat System. The pump-and-treat system operating as the Treatability Study was formally accepted as the selected remedy for ground water beneath the T-25 Area through the ROD. Operation and maintenance of the T-25 Area ground water pump-and-treat system continues through the present, including optimization through the addition of extraction wells and adjustment of pumping rates. Long-term ground water monitoring of many wells in the T-25 Area and across the NSSC installation continues.

2002 Stormwater Sewer System Upgrade/Oil-Water Separator Installation. Continuous soil samples were collected while five geotechnical soil borings were drilled (depths 15 – 36 feet) across the T-25 Area as part of a stormwater sewer system upgrade and oil-water separator installation program (Haley and Aldrich, 2002). Acetone, PAHs, and metals were detected in soil samples, which were conservatively assumed to be representative of the top 10 feet of soil. Polychlorinated biphenyls (PCBs) and hydrocarbons were not detected. Results for benzo(a)anthracene (1,400 µg/kg), benzo(a)pyrene (1,200 µg/kg), and benzo(b)fluoranthene (950 µg/kg) exceeded EPA Region 9 Soil preliminary remediation goal (PRGs) (62 µg/kg for benzo(a)pyrene; 620 µg/kg for benzo(a)anthracene and benzo(b)fluoranthene) (US EPA, 2004). However, the levels were below current MCP S-1/GW-1 standards. Arsenic, lead, chromium, copper, nickel and zinc were detected in all five samples, though only arsenic exceeded the EPA Region 9 PRG, which is a very low level of 0.39 mg/kg. No metals exceeded MCP S-1/GW-1 standards.

2002 – 2003 Well Installations. In the fall of 2002, three new extraction wells were installed to supplement the existing extraction network of the T-25 Area treatment system (ICF Consulting, 2004). Soil samples were collected from between 45 and 66 feet bgs during the installation of these wells and submitted for volatile organic compound (VOC) analysis. Two chemicals, trichloroethene (TCE) (30.8 µg/kg) and tetrachloroethene (PCE) (2.7 µg/kg), were each detected in one of the samples at concentrations below the MCP S-1/GW-1 standards (1,000 µg/kg for PCE, 300 µg/kg for TCE) and below the EPA Region 9 PRGs (PCE, 480 µg/kg; TCE, 53 µg/kg).

During the installation of four new long-term monitoring wells, which are part of the operable unit (OU)-1 ground water monitoring program, soil samples were collected in the T-25 Area from 34 to 108 feet bgs. Samples were analyzed for VOCs; no VOCs were detected at three of the four well locations. In the fourth well location, carbon tetrachloride, toluene, methylene chloride, and xylenes were detected, but all results were below current MCP S-1/GW-1 standards and EPA Region 9 PRGs (ICF Consulting, 2004).

2004 PMFSS Building Site. Two soil borings were advanced at the site of a proposed new building (PMFSS) in the T-25 Area, and soil samples were collected for chemical analysis (MACTEC, 2004). Samples were collected from between 1 – 3 and 4 – 6 feet bgs and analyzed for pesticides, PCBs, metals, volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH). Detected contaminants included: two pesticides, DDD (30.1 µg/kg) and DDT (36.9 µg/kg); metals (arsenic, barium, chromium, lead, nickel, vanadium, and zinc); and C11-22 aromatics (9.01 mg/kg). All pesticide and metal concentrations were below the applicable MCP S-1/GW-1 standards. The C11-22 aromatics were also below the MCP S-1/GW-1 standards. No EPA Region 9 PRG exists for hydrocarbon ranges. Concentrations of arsenic were above the EPA Region 9 PRG in all samples, but all other metals were below the EPA Region 9 PRGs.

2004 MW-2 Kerosene Spill and Investigation. During routine sampling activities in June 2004, a petroleum odor was detected in the well pack of monitoring well MW-2, located south of Building 77 in the T-25 Area. A water level measurement revealed the presence of 2.4 inches of light non-aqueous phase liquid (LNAPL) at a depth above the well screen interval. Ground water and LNAPL samples and a soil sample from the top two feet of the well pack were collected, and VPH analysis revealed both C9-10 aromatics (653 mg/kg) and C9-12 aliphatics (762 mg/kg). While the aliphatics were below the MCP S-1/GW-1 standard of 1,000 mg/kg, the aromatics were above the MCP S-1/GW-1 standard of 100 mg/kg.

In accordance with the notification provisions of the MCP, the Army notified MADEP of the presence of over 1/2 inch of measured LNAPL. MADEP then issued a Release Tracking Number and approved Immediate Response Action (IRA) activities. It was hypothesized that the LNAPL contamination resulted from a surface release, and an investigation was performed in November 2004 to determine the extent and nature of the LNAPL contamination (MACTEC, 2007). Forty soil samples were collected from 10 soil borings and analyzed for VPH and EPH. Results showed that C19-C36 Aliphatics and C11-C22 Aromatics were each present in one subsurface soil sample, but were well below current MCP S-1/GW-1 standards.

On December 29, 2006, soil adjacent to MW-2 was excavated and collected for headspace screening of petroleum hydrocarbons. This action was performed in conjunction with the excavation of an oil-water separator discharge line near Building 77 to perform maintenance, and it included the removal of soil from an area 6 – 8 feet long, 5 feet wide, and 4.5 feet deep. Five discrete samples from depths of <0.5, 0.5, 1.0, 1.5, and 2.0 feet were collected, along with a bulk sample collected from 1 – 2 feet. Lack of visual, olfactory, or instrumental evidence of kerosene contamination in the excavated area led to the determination that there was no residual kerosene contamination near MW-2 (MACTEC, 2007). The excavation was backfilled with clean soil,

compacted, and paved. The area is now designated under the MCP as Adequately Regulated and linked to RTN 3-0002473 under the CERCLA process.

7.2.2 History of Investigations and Removal Actions at Building 14 and Former Building 13

1989 to 1990 Soil Gas Surveys. Extensive soil gas surveys were conducted across the T-25 Area during 1989 and 1990 (NERI, 1989 and 1990). The surveys included over 30 samples located around Building 14 and former Building 13. Results indicated concentrations of benzene, ethylbenzene, toluene, and xylenes (BTEX) above background in the soils to the south of Building 14 and former Building 13.

1990 to 1992 Expanded Site Investigation. Dames & Moore completed an ESI at NSSC (Dames & Moore, 1991; USATHAMA, 1992) to augment the data collected during the soil-gas surveys. As part of the ESI, one water-table well (MW-3) was installed between Building 14 and former Building 13. Low levels of PAHs (below current MCP S-1/GW-1 standards) were detected in a shallow soil sample (0 – 1.5 feet in depth) during the installation of the well.

1991 UST Removal and Site Assessment. The Master Environmental Plan (MEP) reported that a former UST located off the northwest corner of Building 15 was installed in 1979 and removed in 1991. The former UST was a single-walled 1,500-gallon heating oil tank used to heat Building 15. According to the MEP, a site assessment was performed during removal of Tank 15, which included a soil sample collected near the bottom of the tank and analyzed for Total Recoverable Petroleum Hydrocarbons (TRPH), VOCs, lead, and PCBs. No leaks were detected and no detection of contamination using field methods was observed during the removal of the tank, however, TRPH (234 ppm), lead (1.39 ppm), and benzene (8 ppm in duplicate sample only) were detected in the soil at the tank bottom. The TRPH result from 1991 was below the current MCP S-1/GW-1 standard for TPH (1,000 ppm) (Argonne, 1993).

1995 to 1996 Phase II T-25 Area Remedial Investigation. In support of the Phase II T-25 Area RI, an overburden soil boring (EB-79H-HP) was advanced along the drainage trench located inside the northern end of Building 14, and a bedrock boring (EB-51E-HP) was advanced at the southwest corner of Building 14. Subsurface soil samples did not contain detectable concentrations of site-related VOCs, and metals concentrations were below current MCP S-1/GW-1 standards (ADL, 1998).

2003 to 2004 Site Investigation. A Site Investigation (SI) was performed in the vicinity of Building 14 and former Building 13. Extensive surface soil and subsurface soil samples were collected and analyzed for a full suite of analyses. Analytical results identified two areas of contamination and included a localized area to the south/southeast of Building 14 (EB-177A, EB-190A, EB-404A, and EB-405A) of subsurface soil to the south of Building 14 and the surface soil surrounding former Building 13.

In the area south of Building 14, nine PAHs were detected at concentrations exceeding current MCP S-1/GW-1 standards. The depth of the hydrocarbon contamination was generally limited to 12 feet bgs or less. The borings in this area were located at the site of a former oil-water

separator/catch basin and a former UST. The MCP exceedances are consistent with the elevated TPH concentrations observed in this area in the early 1990s during the steam line replacement activities, as well as with the elevated soil gas BTEX results observed during 1989 – 1990. In the surface soil surrounding Building 13, six PAHs and several metals were detected at concentrations exceeding current MCP S-1/GW-1 standards. Metals exceeding standards included beryllium, cadmium, chromium, and nickel and the exceedances were confined to a total of 4 sample locations. PAH contamination was more widespread with exceedances found throughout the grassy area bordering the Building 13 foundation.

2007 Removal Action. A removal action was conducted in 2007 to address contaminated soil that exceeded MCP residential soil standards in the two areas identified during the Site Investigation. At the Building 14 area, soils were excavated over a 1,260 square foot area at depths ranging up to 15 feet (Figure 7-2). At former Building 13, a portion of the concrete incinerator foundation and its associated piping were demolished. Approximately 75 percent of the sub grade footing for the flue stack and the gas line concrete enclosure were left in place due to concerns with the stability of the steep slope to the south of the excavation. Surface soils in a 3,300 square foot area surrounding the foundation were excavated to a depth of one foot (Figure 7-3). A total of 257 tons of soil was removed from the Building 13 excavation and 635 tons of soil was removed from the Building 14 excavation (ICF, 2008a).

Confirmation samples were collected from both excavations. All samples were analyzed for petroleum hydrocarbons, and samples from the former Building 13 area were additionally analyzed for pesticides, PCBs, and metals. No contaminants were detected at concentrations above the cleanup action levels, which were the MCP S-1/GW-1 residential soil standards. Excavated soils were transported to Aggregate Industries in Stoughton, Massachusetts and Aggregate Recycling Corporation in Elliot, Maine for asphalt batch mixing. Both excavations were backfilled with clean soil and compacted. The Building 14 area was repaved and the former Building 13 area was hydroseeded (ICF, 2008a).

7.2.3 History of Investigations and Removal Actions at Boiler Plant

1990 UST Removal Action. Clean Harbors removed four 12,500-gallon fuel oil USTs from the north side of the boiler house at the site. Between 1,200 and 1,500 cubic yards of contaminated soil were excavated. During the excavation process, soil samples were collected from below the tanks and analyzed for petroleum hydrocarbons. The analysis indicated petroleum hydrocarbon concentrations of 20,000 ppm and 34,000 ppm near Tanks #2 and #4, respectively. This condition prompted concerns about the possible migration of No. 6 fuel oil.

To determine the extent of contaminant migration, Clean Harbors performed a subsurface investigation to determine the extent of contamination downgradient of the tank removal. Five soil borings were advanced and supplemental soil samples were collected to characterize subsurface and surface soil. Samples were analyzed for VOCs and TPH. Results indicated no detectable levels of TPH or VOCs in the soil. Hence, the release of No. 6 fuel oil did not appear to have migrated beyond the UST area.

1995 Investigation of Oil-Stained Soils. The Army attempted to install an oil-water separator designed to remove residual hydrocarbons from the waste water flowing from the Building 19 floor drains. The installation was stalled when oil stained soils were encountered in the excavation. Consequently, soil samples were taken and results indicated a TPH concentration of 3,100 ppm, which was above the MCP Reportable Concentration (RC) of 2,500 ppm (Rizzo, 1996).

1996 Monitoring Well Installation. Soil samples were collected and analyzed during the installation of MW-91A-HP2, located just downgradient of the leachfield. The results of the analyses indicated that several PAHs, pesticides, and one PCB (Aroclor 1260) were present in the soil sample collected from 4 feet bgs. Concentrations of benzo(a)anthracene (1,800 µg/kg), benzo(a)pyrene (2,200 µg/kg), benzo(a)fluoranthene (3,500 µg/kg), and indeno(1,2,3 cd)pyrene (2,300 µg/kg) were detected above MCP S-2 RCs (HLA, 1998).

1998 to 1999 Phase II T-25 Area SI. Analytical data results from the T-25 Area Phase II SI indicated the presence of PAHs and PCBs in soil at concentrations exceeding MCP S-1/GW-1 soil standards near Building 19, especially in the vicinity of the Boiler Plant leach field and in fill soils immediately southeast of the retaining wall. Exceedances were generally in the upper 10 feet of the soil column north of the retaining wall and in the upper 5 feet of the soil column south of the retaining wall. In addition, sporadic exceedances of MCP standards were observed for the pesticides gamma-BHC and dieldrin, EPH, and lead (Harding ESE, 2003).

2001 Release Abatement Measure. A Release Abatement Measure (RAM) was performed at the former leach field to remove soils with PAH, PCB, and lead in concentrations exceeding S-1/GW-1 standards (Figure 7-4). Excavation depths were approximately 10 feet bgs north of the retaining wall and up to approximately 5 feet bgs south of the retaining wall. A total of approximately 768 cubic yards of contaminated soil was shipped off-site for treatment. The confirmatory soil samples that were collected indicated that contaminant concentrations of soils remaining in place were below MCP S-1/GW-1 standards. Review of the RAM confirmatory sample analyses indicated that the removal action met all current MCP S-1/GW-1 standards. Other activities performed during the RAM included: removal of retaining wall (south of parking area); removal of Building 23 and associated piping, fittings, and accessories; removal of guardrails and asphalt pavement; removal of the former leach field; backfilling and compacting excavation; and removal of four monitoring wells (CHI-4, CHI-5, MW-91A-HP2, and MW-106A-2) (Harding ESE, 2001).

2003 Final Phase II SI. The Final SI Report was submitted and summarized field investigations, the presence and nature of site contamination, and potential human health and ecological risks from exposure to soil, ground water, and surface water at the Boiler Plant (Harding ESE, 2003). A Method 2 Risk Characterization and a Class A-2 Response Action Outcome Statement was prepared by Harding ESE, documenting: a condition of No Significant Risk of harm to health, public welfare, and the environment exists under current and foreseeable future use conditions; no additional investigative activities or Response Actions are necessary; a Class A-2 Response Action Outcome has been achieved for the site; and no Activity and Use Limitation is required to achieve and maintain the condition of No Significant Risk (Harding ESE, 2003).

7.3 HISTORY OF CERCLA ENFORCEMENT ACTIVITIES

NSSC was added to the NPL under CERCLA, as amended by SARA, in May 1994, to evaluate and implement response actions to clean up past releases of hazardous substances, pollutants, and contaminants. The CERCLIS ID number for the Site is MA1210020631. The T-25 Area, Building 14 and Former Building 13, and Boiler Plant are considered subareas to the entire Site.

A Federal Facility Agreement between the U.S. Department of the Army and the U.S. Environmental Protection Agency was signed in August 2006 to establish a procedural framework for ensuring that appropriate response actions are implemented at NSSC (US EPA, 2006). The U.S. Army is the lead agency responsible for environmental cleanup at this Site.

8.0 COMMUNITY PARTICIPATION

Notice of the availability of the Proposed Plan for soil at the T-25 Area, Building 14 and Former Building 13, and Boiler Plant was published in The MetroWest Daily News on March 30, 2008, April 3, 2008, and April 10, 2008. A public informational meeting and hearing on the Proposed Plan was held at the Frederick Conley Public Safety Training Center in Natick on April 17, 2008, and a public comment period was held from April 17 through May, 18 2008. At the public meeting, the Army presented the Proposed Plan and answered questions from the public prior to providing opportunity for formal comments on the Proposed Plan. Comments received during the public comment period and the Army's responses are contained in the Responsiveness Summary (Section 15.0) that is a part of this Record of Decision.

In addition, the community has been kept advised of investigative and cleanup activities at the T-25, Building 14 and Former Building 13, and Boiler Plant areas through presentations by the Army at Restoration Advisory Board meetings held, following public notice, on an approximate quarterly basis throughout the year.

The Proposed Plan and other T-25 Area, Building 14 and Former Building 13, and Boiler Plant documents were made available for public review in the Administrative Record that is maintained at NSSC and at the Morse Institute Library located at 14 East Central Street in Natick, Massachusetts.

9.0 SCOPE AND ROLE OF OPERABLE UNITS AND RESPONSE ACTION

In August 2006, the U.S. Department of the Army and the EPA signed a Federal Facility Agreement, which identified eight Areas of Concern and three Site Screening Areas at NSSC (US EPA, 2006).

This ROD selects the final remedy for soil at the T-25 Area, Building 14 and Former Building 13, and Boiler Plant (Operable Unit 4). Ground water is not known to be contaminated as a result of activities at Building 14 and Former Building 13, and Boiler Plant; however, additional investigation into the dieldrin detection at the Boiler Plant and the petroleum hydrocarbons at Building 14 and former Building 13 will be performed. It is noted, however, that ground water

beneath all these areas is within the capture zone of the existing NSSC ground water extraction and treatment system.

The remaining identified Areas of Concern and Site Screening Areas at the NSSC have been or are being addressed separately.

10.0 SITE CHARACTERISTICS

This section summarizes the site characteristics at the T-25 Area, Building 14 and Former Building 13, and Boiler Plant.

10.1 SITE CHARACTERISTICS AT THE T-25 AREA

This subsection summarizes site characteristics of the T-25 Area.

10.1.1 T-25 Area Geology

In and around the T-25 Area, overburden thickness ranges from approximately 155 feet (at the northeast boundary) to 199 feet (at the southwest and northwestern boundaries). In general, overburden thickness increases to the west and north. The unconsolidated overburden deposits observed at NSSC can be divided into six broad stratigraphic units listed generally in order of depth from ground surface: 1) sand and gravel, 2) fine-to-medium sand, 3) silty sand, 4) silt, 5) clayey silt, 6) glacial till. Bedrock at NSSC is encountered at depths ranging from approximately 54 to 199 feet bgs, and elevations ranging from 34 feet below mean sea level (msl) to 107 feet above msl. The lithology of the bedrock at NSSC is consistent with the regional bedrock descriptions, and consists primarily of Dedham Granodiorite and Diabase/Hornblende Gabbro Undivided. Bedrock cores collected at NSSC displayed varying degrees of competency (ICF, 2007).

10.1.2 T-25 Area Hydrogeology

Ground water at the T-25 Area is generally encountered between 14 and 16 feet bgs. The overburden aquifer can be characterized by two main hydrostratigraphic units: an upper unconfined gravel to silty sand unit (less than 30 feet bgs) and a lower silty sand to clayey silt unit (30 to 65 feet bgs). The upper and lower portions of the aquifer are separated by a layer of light olive gray clayey silt.

The geologic materials encountered in the T-25 Area are fairly heterogeneous with lenses of very fine material, and sands and gravels. As is commonly the case for glacial aquifers, ground water flow through the aquifer at the site was determined to be highly anisotropic with horizontal hydraulic conductivities higher than vertical hydraulic conductivities.

Ground water flow in the shallow A-interval aquifer (less than 30 feet bgs) across the T-25 Area is to the west-northwest over a relatively gradual gradient. The operation of the T-25 Area extraction wells does not appear to have a significant impact on shallow ground water flow direction. Ground water flow in the deeper B-interval (30 to 65 feet bgs) is also to the west-northwest under non-pumping conditions. However, B-interval ground water flow is clearly influenced when the T-25

Area ground water extraction system is in operation – cones of depression are evident near each operating extraction wells. The B-interval capture zone of the T-25 Area extraction system extends beyond the boundary of the T-25 Area to the east, north, and west. Ground water elevation and the magnitude of the horizontal gradient appear to fluctuate seasonally, though ground water flow direction generally remains constant.

The ground water beneath the entire NSSC facility has been designated as a Zone II for the Town of Natick Springvale Well Field (ICF, 2007).

10.1.3 Nature and Distribution of Soil Contamination at the T-25 Area

Soil contamination in the T-25 Area was limited primarily to the Storage Area, from 1 to 10 feet bgs, and was comprised mainly of the pesticides, which had previously been stored in the area, and PAHs, which result from heavy vehicle use and maintenance. The pesticides detected above the MCP Method 1 S-1 standards were chlordane, DDD, and DDT. Soil contaminated with pesticides and PAHs above the MCP Method 1 S-1/GW-1 standards were removed during the Storage Area Removal Action in 1997. The action resulted in the removal of approximately 1,380 tons of contaminated soil from the Storage Area and the east side of the tennis courts (Weston, 1999), and excavated to depths between 1 and 10 feet bgs. The Storage Area was subsequently backfilled with clean soil and paved.

In addition to the Storage Area, the MW-2 well had been contaminated with LNAPL. In December 2006, soil adjacent to MW-2 was excavated and collected for headspace screening of petroleum hydrocarbons, in conjunction with the excavation of an oil-water separator discharge line for maintenance. Soil from an area 6 – 8 feet long, 5 feet wide, and 4.5 feet deep was removed. Five discrete samples from depths of <0.5 to 2.0 feet were collected, but samples were below the MCP S-1/GW-1 standards and a lack of visual/olfactory evidence of kerosene contamination in the excavated area led to the determination that there was no residual kerosene contamination near MW-2 (MACTEC, 2007). The excavation was backfilled with clean soil, compacted, and paved.

10.2 SITE CHARACTERISTICS AT BUILDING 14 AND FORMER BUILDING 13

This subsection summarizes site characteristics at the Building 14 and former Building 13 area.

10.2.1 Geology at Building 14 and Former Building 13

The soil found at the Building 14 and Former Building 13 area consists predominantly of fill materials overlying medium to fine sands of a glaciolacustrine nature. Overburden thickness ranges from 160 to 199 feet. Specific soils found consist primarily of well-sorted fine to medium sand and some coarse sand and gravel near the surface. Fine to medium sand was observed in all the soil borings across the study area, and is present at thicknesses ranging from approximately 30 to 70 feet. Beneath the fine to medium sand layer lies a silty sand layer ranging in thickness from approximately 0 to 20 feet. The silty sand layer is underlain by a clayey silt/very fine sand and clay layer approximately 40 feet thick. Another silty sand layer is observed below the clayey silt layer, and ranges in thickness from approximately 40 to 70 feet thick. A poorly sorted, very dense, and discontinuous layer of glacial till was observed overlying bedrock in the boring to the southwest of

Building 14 with a thickness of approximately 45 feet. The bedrock depth at the southwest corner of Building 14 is 199 feet bgs. The bedrock at this location consists of Dedham Granodiorite and Diabase/Gabbro Undivided.

10.2.2 Hydrogeology at Building 14 and Former Building 13

Ground water generally occurs in two aquifers underlying the northern part of NSSC; an upper, unconfined water table aquifer (A-interval) located predominantly in a sand and gravel layer and a lower, semi-confined deep aquifer separated by a low conductivity silt/clayey silt layer. In the Building 14 and former Building 13 area, ground water depths range from approximately 13 feet bgs to 27 feet. Shallow (A-interval) ground water flows in the west-northwest direction toward Lake Cochituate. The shallow ground water flow direction is not affected by the existing T-25 Area ground water treatment system. When the existing T-25 Area ground water treatment system is operating, the B-interval ground water flow direction is to the north-northeast, towards extraction wells MW-90B-4 and MW-94B-4; when it is not operating the flow direction is to the west toward Lake Cochituate.

10.2.3 Nature and Distribution of Soil Contamination at Building 14 and Former Building 13

The SI completed in 2004 indicated two areas of contamination present in the vicinity of Building 14 and the former Building 13. MCP S-1/GW-1 exceedances included nine PAHs and aromatic hydrocarbons in subsurface soil in a localized area to the south/southeast of Building 14 and six PAHs and four metals (beryllium, cadmium, chromium, and nickel) in the surface soil surrounding the former Building 13. Contamination in the Building 13 area was confined to soils less than one foot bgs. The contamination south of Building 14 extended into the subsurface soil but was generally limited to 12 feet bgs or less. Pesticides, PCBs, and some VOCs were also identified the Building 14/13 soils but were detected at levels below MCP S-1/GW-1 standards (ICF, 2005).

A removal action was conducted in 2007 to address the contaminated soils exceeding MCP S-1/GW-1 standards. During the removal action, a portion of the Building 13 concrete incinerator foundation and associated piping were demolished. Approximately 75 percent of the sub grade footing for the flue stack and the gas line concrete enclosure were left in place due to concerns with the stability of the steep slope to the south of the excavation. Surface soils in a 3,300 square foot area surrounding the foundation were excavated to a depth of one foot. In the area south of Building 14, soils were excavated over a 1,260 square foot area at depths up to 15 feet. A total of 257 tons and 635 tons of soil were removed from the Building 13 and Building 14 excavations, respectively.

Confirmation samples were collected from both excavations. All samples were analyzed for petroleum hydrocarbons (including PAHs), and samples from the former Building 13 area were additionally analyzed for pesticides, PCBs, and metals. No compounds were detected at concentrations above the MCP S-1/GW-1 standards. Excavated soils were transported to Aggregate Industries in Stoughton, Massachusetts and Aggregate Recycling Corporation in Elliot, Maine for asphalt batch mixing. Both excavations were backfilled with clean soil and compacted. The Building 14 area was repaved and the former Building 13 area was hydroseeded (ICF, 2008a).

10.3 SITE CHARACTERISTICS AT THE BOILER PLANT

This subsection summarizes site characteristics at the Boiler Plant site.

10.3.1 Geology at the Boiler Plant

Soils found at the Boiler Plant area consist predominantly of fill overlying glaciolacustrine and lacustrine deposits. Overburden thickness as interpreted from a bedrock boring at the site are up to 123 feet. The general geologic sequence in the area is sand overlying silty sand which in turn overlies sandy silt and silt. Beneath the sandy silt and silt there is a sharp change to poorly graded sand and gravels. Bedrock was encountered at 123 feet deep at the site. This sequence is consistent with depositional environments created by decreasing glacial lake elevations.

10.3.2 Hydrogeology at the Boiler Plant

The water table aquifer at the Boiler Plant Site consists of poorly graded sand with interbedded silty sand, and the deep overburden aquifer consists of the sandy silt and silt formation. Depth to the water table varies from essentially 0 feet bgs at the lakeshore to over 25 feet bgs on the northern side of C Street. Water table piezometric contours roughly mimic the topography and lake shoreline, resulting in an approximately north to south ground water flow direction. Potentiometric data indicate that the water table aquifer discharges to South Pond in the near shore area adjacent to the Boiler Plant, and the deeper aquifer discharges to the deeper offshore portions of South Pond. Surface water drainage at the Boiler Plant primarily follows the topography and discharges to South Pond, with a portion of runoff directed to the MSO through an oil-water separator.

10.3.3 Nature and Distribution of Soil Contamination at the Boiler Plant

The SI indicated the presence of PAHs and PCBs in soil at concentrations exceeding MCP S-1/GW-1 soil standards near Building 19, especially in the vicinity of the Boiler Plant leach field and in fill soils immediately southeast of the retaining wall. Exceedances were generally in the upper 10 feet of the soil column north of the retaining wall and in the upper 5 feet of the soil column south of the retaining wall. In addition, sporadic exceedances of MCP S-1 standards were observed for the pesticides gamma-BHC and dieldrin, EPH, and lead (Harding ESE, 2003).

A RAM was conducted at the former leach field to remove soil with PAH, PCB, and lead in concentrations exceeding MCP S-1/GW-1 standards. Excavation depths were approximately 10 feet bgs north of the retaining wall and up to approximately 5 feet bgs south of the retaining wall. A total of approximately 768 cubic yards of contaminated soil was shipped off-site for treatment. The confirmatory soil samples that were collected indicated that contaminant concentrations of soil remaining in place were below MCP S-1/GW-1 standards. Review of the RAM confirmatory sample analyses indicates that the removal action meets all current MCP S-1/GW-1 standards. Other activities performed during the RAM included: removal of a retaining wall (south of parking area); removal of Building 23 and associated piping, fittings, and accessories; removal of guardrails and asphalt pavement; removal of the former leach field; backfilling and compacting excavation; and, removal of four monitoring wells (CHI-4, CHI-5, MW-91A-HP2, and MW-106A-2) (Harding ESE, 2001).

11.0 CURRENT AND POTENTIAL FUTURE LAND USE

This section discusses current and potential land use at the T-25 Area, Building 14 and Former Building 13, and Boiler Plant.

NSSC has no plans to develop or alter current land use at the T-25 Area, Building 14 and Former Building 13, or Boiler Plant areas. The NSSC facility is not currently slated to close, and is expected to remain a permanent Army installation over the long term.

12.0 SUMMARY OF SITE RISKS

This section discusses the human health and ecological risks potentially associated with soil at the T-25 Area, Building 14 and Former Building 13, and Boiler Plant.

12.1 SUMMARY OF POTENTIAL RISKS AT THE T-25 AREA

As part of the Phase II RI (ADL, 1998), the Army, with input and oversight from EPA and MADEP, conducted a HHRA to estimate the probability and magnitude of potential adverse human health effects from contaminants in surface soils and ground water associated with the T-25 Area site. The results of the HHRA were used to determine the need for cleanup at the T-25 Area. A separate HHRA was conducted for the Storage Area surface and subsurface soils. The risks discussed in this section are related to soil only. Potential risks associated with ground water and sediment exposures are addressed in separate decision documents.

The risk of harm to human health is evaluated by calculating incremental cancer and non-cancer risks associated with estimated exposures to selected chemicals of concern, and comparing the estimated risks to EPA's acceptable incremental risk limits. For the Phase II RI HHRA, risks for surface soil contact were evaluated for facility employees using the ball field, trespassers on the ball field, residents near the site potentially exposed to windblown dust from the ball field, and construction workers in the T-25 Area. Exposure routes evaluated included incidental ingestion, dermal contact, and inhalation. For all scenarios, both average and upper bound exposures and risks were calculated.

The HHRA did not identify any unacceptable health risks due to exposure to site-related contaminants in soil at the T-25 Area. The HHRA conducted for the Storage Area soil resulted in a soil removal action eliminating soil concentrations exceeding MCP residential soil standards in this area in 1997. Because the Storage Area soils were removed, they no longer pose any risks to individuals who may contact soils at the T-25 Area.

The Supplemental Soil RI (ICF 2008b) evaluated potential risks associated with soil data collected since the completion of the Phase II RI. The Supplemental RI confirmed the conclusions from the Phase I/II risk assessments, and recommended that no further action was required to address the T-25 Area soils.

Minimal ecological risks were identified for soils at the T-25 Area; however the incremental risks were deemed ecologically insignificant because the contaminant concentrations were similar to background levels and the area is highly localized and a low-quality terrestrial habitat for animals.

12.1.1 Human Health Risk Assessment at the T-25 Area

HHRA consists of four steps: hazard identification; exposure assessment; toxicity assessment; and risk characterization.

12.1.1.1 Hazard Identification at the T-25 Area

During the Phase I and Phase II RI, 22 surface soil samples (defined as 0 to 2 feet bgs) were collected within the T-25 Area. Two sample locations (RA-8 and -9) were incorporated into the Building 62 and 68 OU and five sample locations (RA-10, -14, -16, -34, and -35) no longer exist due to the remediation of the Chlordane Storage Area in 1997. The 15 remaining samples were collected in two different areas, the T-25 ballfield at 0 to 6 inches and at Building 77 at 0 to 2 feet bgs. The ten samples collected from the T-25 ballfield were analyzed for VOCs, semivolatile organic compounds (SVOCs), pesticides, PCBs, and metals. The five samples from Building 77 were analyzed for VOCs only.

As reviewed in Section 10.1.3, soil contamination in the T-25 Area was limited primarily to the Storage Area, from 1 to 10 feet bgs, and was comprised mainly of the pesticides which had previously been stored in the area, and PAHs, which result from heavy vehicle use and maintenance. Pesticides detected above the MCP Method 1 S-1 standards were chlordane, DDD, and DDT. Soil contaminated with pesticides and PAHs above the MCP standards was removed during the Storage Area Removal Action in 1997. The Storage Area was subsequently backfilled with clean soil and paved.

In an initial step of the T-25 Area Phase II HHRA, contaminants of concern (COCs) in surface soil were selected for inclusion in further steps of the HHRA, in order to focus the discussion of risk on those compounds that account for the greatest potential risks. COCs were selected based on one or more of the following criteria:

- Exceedance of a conservative screening criterion; EPA Region III risk-based concentrations (RBCs) for residential soils (US EPA, 1995) were used as screening criteria, although residential soil contact does not occur at the site;
- Comparison to site-specific background surface soil concentrations;
- Detection in less than 5 percent of the samples taken, unless the chemical was known to be site-related; and,
- Professional judgment with regard to blank contamination or essential human nutrients.

No COCs were selected in subsurface soil, because the maximum detected concentrations did not exceed the COC screening criteria, thus human health risks associated with potential exposures to subsurface soils were not evaluated.

Since the completion of the Phase II RI in 1998, additional soil data collection activities have occurred within the T-25 Area in relation to a stormwater sewer system upgrade, the installation of new long-term monitoring wells and extraction wells, the construction of new buildings, and a kerosene spill near monitoring well MW-2. Soil samples were collected and submitted for a wide range of chemical analyses during each of these activities (ICF, 2008b).

12.1.1.2 Exposure Assessment at the T-25 Area

The exposure assessment section consisted of identification of exposure pathways and quantification of such exposure. Exposure pathways were identified by considering current and potential future site uses, along with consideration of contaminated media. NSSC is an operating research laboratory, with restricted public access. The T-25 Area consists of buildings and a ballfield used intermittently by NSSC staff. Residential areas surround the T-25 Area on three sides. The post is currently operational and there are no plans or expectations that this will change in the future. Because future land use is expected to remain the same as current land use, it is unlikely that residences will be built on the T-25 Area and that residential soil contact will occur. The potentially exposed human populations considered in the Phase II RI for the T-25 Area soils are summarized in Table 12-1. Potential human health risks associated with exposure to sediment and surface water at the T-25 Area outfall were also evaluated in the Phase II RI, but are summarized elsewhere (ICF, 2007).

Table 12-1: Potentially Exposed Populations—T-25 Area Surface Soil

Potentially Exposed Populations	Time Frame
Facility employees using the ballfield	Current and future
Trespassers on the ballfield	Current and future
Residents near the site potentially exposed to windblown dust from the ballfield (indoor and outdoor exposures)	Current and future
Construction workers in the T-25 Area	Future

Exposure routes evaluated included incidental ingestion, dermal contact, and inhalation.

12.1.1.3 Toxicity Assessment at the T-25 Area Soils

Toxicity assessment for the selected COCs was accomplished using published EPA toxicity values that provide quantitative estimates of the toxicity of chemicals and resultant toxic effects. The most current toxicity values located in the EPA Integrated Risk Information System (IRIS) on-line database or in the Health Effects Assessment Summary Tables (HEAST) were used in the HHRA.

For substances suspected to cause noncarcinogenic chronic effects, a reference dose (RfD), or a reference concentration (RfC) for inhalation exposures, is developed by EPA. In the HHRA, chronic RfDs or RfCs were used as the toxicity values for noncarcinogenic health effects for exposures greater than 7 years. For exposures of less than 7 years, subchronic RfDs were used. A

chronic RfD is defined as an estimate (with uncertainty spanning an order of magnitude or greater) of a daily exposure level for the human population, including sensitive subpopulations, that is likely to be without an appreciable risk of deleterious effects during a lifetime. RfDs are based on published toxicity data. Chronic RfDs are specifically developed to be protective for long-term exposure to a compound. Uncertainty factors have been incorporated into the RfDs to account for extrapolations from animal toxic effects data and to protect sensitive human subpopulations, such as children.

For carcinogenic effects, cancer potency factors (CPFs), quantitative risk estimates of carcinogenicity derived by the EPA, were used. Potency values relate the lifetime probability of excess tumors to the lifetime average exposure dose of a substance. The CPF (sometimes called the cancer slope factor or CSF) is estimated using mathematical extrapolation models, most commonly the linearized multi-stage model, and is presented as the risk per mg/kg/day (i.e., mg dose carcinogen per Kg body weight per day). The EPA's Weight-of-Evidence classification for carcinogenicity, based on an evaluation of the likelihood that the agent is a human carcinogen, was also cited for each COC in the HHRA.

12.1.1.4 Risk Characterization for the T-25 Area Soils

For the 1998 baseline HHRA, non-cancer risks were estimated using a hazard index (HI) approach, where the estimated average daily dose of a chemical is directly compared to a "reference dose" which is considered a "safe" level of exposure. In general, for EPA risk assessments, estimated non-cancer HIs are compared to a HI of 1. Cancer risks are estimated as a probability that a potentially exposed individual could get cancer as a result of the estimated chemical exposure. Cancer risk estimates are compared to EPA's generally allowable risk limit range, which represents an increased (incremental) risk (or probability) of cancer for an individual potentially exposed to site contaminants, in addition to each individual's baseline cancer risk. The incremental allowable cancer risk range is identified in the NCP (US EPA, 1990) as 1×10^{-6} to 1×10^{-4} , or an increased probability of developing cancer of 1 in 1,000,000 to 1 in 10,000 over the course of a 70-year lifetime. Although the EPA considers estimated incremental cancer risks from a site to be acceptable if they are in the range of an incremental cancer risk of 1×10^{-4} to 1×10^{-6} , an increased cancer risk of 1×10^{-4} is often used as the point of departure for undertaking remedial actions at a site.

The populations potentially exposed to soil at the T-25 Area and the risk results from the Phase II RI for the T-25 Area are summarized in Table 12-2. The estimated cancer and non-cancer risks for all potentially exposed populations evaluated in the Phase II RI were below or within the levels considered acceptable by EPA (ADL, 1998).

The Final T-25 Area Supplemental RI Report (ICF, 2008b) evaluated potential risks associated with soil data collected since the completion of the Phase II RI by comparisons to current risk-based residential soil standards. Chemicals in soil that exceeded current MCP S-1/GW-1 criteria or EPA Region 9 PRGs are summarized in Table 12-3 for surface soils, and Table 12-4 for subsurface soils. No VOCs, pesticides, or PCBs were detected above the criteria in surface or subsurface soil.

In light of the exceedances of current residential risk-based criteria discussed in the Supplemental RI (MCP S-1/GW-1 soil standards and EPA Region 9 PRGs), an updated risk evaluation was conducted to determine what impact (if any) these new exceedances have on the overall conclusions of the 1998 HHRA. In addition, the updated risk evaluation assessed the impacts of any changes in risk assessment methodology since conducting the 1998 HHRA, such as changes in:

- (1) the newly detected chemical concentrations in surface soil since the 1998 RI have no impact on the previously calculated human health risks due to surface soil at the T-25 Area,
- (2) changes to toxicity values do not impact the overall risk conclusions from the 1998 HHRA, and
- (3) changes to exposure parameters do not impact the overall risk conclusions from the 1998 HHRA.

Table 12-2: Summary of 1998 HHRA for All Selected Chemicals of Concern

Medium	Potentially Exposed Populations	Exposure Routes Evaluated	Time Frame	1998 HHRA Risk Results	
				Upper Bound HI	Upper Bound Incremental Cancer Risk
Surface Soil	Facility employees using the ballfield	Ingestion, dermal contact, inhalation of particulates	Current and future	0.005	4.3×10^{-6}
	Trespassers on the ballfield – adults and children ages 7 to 18	Ingestion, dermal contact, inhalation of particulates	Current and future	0.001 (adult) 0.002 (ages 7 to 18)	1.1×10^{-6} (adults) 8.0×10^{-7} (ages 7-18)
	Residents near the site potentially exposed to windblown dust from the ballfield indoors and outdoors – adults, ages 7 to 18, and ages 0 to 6	Ingestion, dermal contact, inhalation of particulates	Current and future	$<10^{-13}$	Outdoor: 5.0×10^{-6} (adults) 8.0×10^{-6} (ages 7-18) 7.0×10^{-6} (ages 0-6) Indoor: 2.0×10^{-5} (adults) 3.0×10^{-5} (ages 7-18) 2.0×10^{-5} (ages 0-6)
Subsurface Soil	Construction workers in the T-25 Area		Future	Not evaluated ¹	Not evaluated ¹

¹ No COCs were selected in subsurface soil, because the maximum detected concentrations did not exceed the COC screening concentrations (the risk-based criteria or guidelines) or chemicals in subsurface soil were detected at concentrations similar to background, thus human health risks associated with potential exposures to subsurface soil were not evaluated.

Table 12-3: Exceedances of Current Standards—T-25 Area Surface Soil

Chemical Detected in Soil that Exceeds Current MCP or Region 9 Benchmarks	Concentration (mg/kg)	Depth (ft bgs)	Investigation Phase	MCP S-1/GW-1 (Current 2006) (mg/kg)	Current (2004) Region IX Residential Soil PRG ¹ (mg/kg)
Aluminum	7,830 to 16,500	0 – 0.5	Phase II RI	NA	7600 (adjusted PRG)
Arsenic	3 to 11.7	0 – 0.5	Phase II RI	20	0.39
Chromium	48.8	0 – 0.5	Phase II RI	30 (assumes Cr VI)	210 (assumes ratio of Cr VI/Cr III)
	53.4	0 – 0.5	Phase II RI		
Iron	9,060 – 14,100	0 – 0.5	Phase II RI	NA	2300 (adjusted PRG)
Manganese	220 – 254	0 – 0.5	Phase II RI	NA	180 (adjusted PRG)
Vanadium	14.2 – 32.8	0 – 0.5	Phase II RI	600	7.8 (adjusted PRG)
Benzo(a)anthracene	1.4	unknown ²	Storm Water—Sewer System Upgrade	7	0.620
Benzo(a)pyrene	1.2	unknown ²	Storm Water—Sewer System Upgrade	2	0.062
Benzo(b)fluoranthene	0.95	unknown ²	Storm Water—Sewer System Upgrade	7	0.620
	0.82	0 – 0.5	Phase II RI		

Notes: NA = not available

1. Residential soil corresponding to a 10⁻⁶ incremental cancer risk or a hazard index of 1; adjusted PRG is for PRGs based on non-cancer endpoints, adjusted down by 0.1, as per EPA Region I guidance.
2. Soil sample of unknown depth; possible composite sample collected over total length of borehole B-7.

Table 12-4: Exceedances of Current Standards—T-25 Area Subsurface Soil

Chemical Detected in Soil that Exceeds Current MCP or Region 9 Benchmarks	Concentration (mg/kg)	Depth (ft bgs)	Investigation Phase	MCP S-1/GW-1 (Current 2006) (mg/kg)	Current (2004) Region IX Residential Soil PRG ¹ (mg/kg)
Aluminum	7,890 – 16,100	4 – 79	Phase II RI	NA	7,600 (adjusted PRG)
Arsenic	1.71 – 6.38	4 – 79	Phase II RI	20	0.39
	2.4 – 4.6	1 – 6	PMFSS Building Site		
Chromium	35.8	54	Phase II RI	30 (assumes all Cr VI)	210 (assumes ratio of Cr VI/Cr III)
Iron	5,380 – 22,200	4 – 79	Phase II RI	NA	2,300 (adjusted PRG)
Manganese	190 – 639	4 – 79	Phase II RI	NA	180 (adjusted PRG)
Nickel	20.1	54	Phase II RI	20	160 (adjusted PRG)
Vanadium	11.6 – 45.9	4 – 79	Phase II RI	600	7.8 (adjusted PRG)
	11 – 18	1 – 6	PMFSS Building Site		

Notes: NA = not available

1. Residential soil corresponding to a 10⁻⁶ incremental cancer risk or a hazard index of 1; adjusted PRG is adjusted down by 0.1, as per EPA Region I guidance.

12.1.2 Ecological Risk Assessment

As part of the RI, a Tier I Ecological Risk Assessment (ERA) was performed to evaluate potential impacts to ecological receptors at the T-25 Area from exposure to site contamination. Potential exposure to surface soil was evaluated. Exposure to site contamination found in sediment and ground water are being addressed as part of a separate operable unit and are not discussed here.

The ERA performed during the Phase II RI concluded that neither the total nor COC-specific average and maximum surface soil risks at the T-25 Area were incrementally significant relative to the total background surface soil risks. Additionally, the highly localized, ecologically insignificant surface soil pesticide risks in the Storage Area were eliminated during the Storage Area removal action.

Surface soil contaminants detected in Phase I RI (ADL, 1996) samples from the T-25 Area indicated localized risk to terrestrial biota, such as invertebrates and their predators, primarily from pesticides such as chlordane, and to a lesser degree from metals such as lead. Based on this preliminary screening-level ERA for T-25 Area surface soils it was concluded that:

- T-25 Area activities had not resulted in any visible damages to receptor habitats.
- No adverse ecological impacts from these activities were evident.
- No vegetative stress symptoms were seen in the terrestrial, wetland, or aquatic habitats that currently receive, or may have been historical receptors for, surface soil, sediment, and/or surface water contaminants released from the T-25 Area.
- No adverse impacts were evident to the vertebrate fauna reported locally at NSSC or in adjacent, off-post areas, which were surprisingly abundant and diverse for a highly developed suburban area.
- There were no confirmed sightings of federal- or state-listed biota and no evidence of adverse impacts to rare, threatened, or endangered flora or fauna.
- No adverse impacts from the T-25 Area on avian trust species, such as migratory birds, were observed in the field or documented in prior studies. Several areas of the upland and wetland habitats along the shoreline of Lake Cochituate provide significant food, cover, and nesting resources for migratory birds and other wildlife.

A more comprehensive ERA was conducted as part of the Phase II RI, using the combined Phase I and Phase II analytical data for surface soils. The Phase II ERA evaluated ecological risks by comparing average and maximum detected concentrations of COCs both at the site and at background locations to conservative, screening-level ecotoxicological benchmarks and regulatory criteria/guidelines designed to protect various groups of ecological receptors. The soil risks at the T-25 Area ballfield were low (average HI=7) to moderate (maximum HI=16) and driven entirely by aluminum, lead, and vanadium, all of which exhibited low potential risks even at their maximum detected concentrations. In addition, when compared to background risks, neither the total nor COC-specific average and maximum surface soil risks at the T-25 Area ballfield were incrementally significant relative to the total background surface soil risks. Considering the low quality and small area of the landscaped ballfield "habitat," the chemical similarity of its soils to those of the background sample locations, and because these highly localized risks occur within a

poor quality habitat surrounded by higher quality terrestrial habitat in other areas within NSSC and off-site, the potential risks from dietary (food chain) exposures to inorganic COCs were deemed insignificant to resident or migratory wildlife. Thus, the Phase II ERA concluded that surface soils associated with the T-25 Area posed no significant risk to resident or migratory wildlife species at any level of ecosystem integration.

Surface soil from the Storage Area, an unpaved area of approximately 2,400 square feet found to contain elevated concentrations of pesticides, was excavated and disposed in 1997. Prior to the 1997 soil removal action, the surface soil risks were medium (HI=19) to high (HI=133) with chlordane (maximum HQ = 124) acting as the primary risk driver. Lead, DDD, and DDT accounted for the balance of the total, pre-removal surface soil risk in the Storage Area. Nevertheless, due to the low habitat value of the Storage Area as a potential foraging area for wildlife, even the large hypothetical soil pesticide risk increments, prior to the soil removal, probably had been ecologically insignificant. Any individual animals that may have encountered these hot spots on occasion could not have derived a significant fraction of their dietary needs from this 2,400 square feet area and, therefore, would not have been chronically exposed to these pre-removal, ecological COC hot spots. Thus, even these maximum risks were considered ecologically insignificant at the population, species, and community levels of ecosystem integration.

Due to the lack of significant incremental ecological risk in the surface soil of the T-25 Area and because the Storage Area soils have been remediated, no further study of ecological risk was recommended for the surface soil and terrestrial receptors at the T-25 Area or Storage Area.

12.1.3 Summary and Conclusions for the T-25 Area Soils

The 1998 HHRA concluded that cancer and non-cancer risks for surface soil contact for all potentially exposed populations evaluated were below or within the levels considered acceptable by EPA. Surface and subsurface soil data collected during and subsequent to the Phase II T-25 Area (ADL, 1998) were compared to current residential risk-based criteria (MCP S-1/GW-1 soil standards and EPA Region 9 PRGs). Although there were some exceedances of the EPA Region 9 PRGs and MCP S-1/GW-1 standards for a few metals and PAHs, the updated risk evaluation concluded that these exceedances, and changes to risk assessment methodology since 1998, do not impact the overall conclusions of the 1998 HHRA (ICF, 2008b). The Phase II ERA concluded that when compared with background concentrations, the ecological risks associated with surface soil at the T-25 Area ballfield were incrementally insignificant.

12.1.4 Basis for Remedial Action at the T-25 Area

Based on the results of the human health and ecological risk assessments, No Further Action is necessary for remediation of the T-25 Area soil.

12.2 SUMMARY OF POTENTIAL RISKS AT BUILDING 14 AND FORMER BUILDING 13

The risks discussed in this section are related to soil only. Potential risks associated with ground water and sediment exposures are addressed in separate decision documents.

A removal action was conducted in 2007 to address contaminated soil that exceeded MCP residential soil standards in two areas identified during the SI. A total of 257 tons of soil was removed from the Building 13 excavation; 635 tons of soil was removed from the Building 14 excavation.

Before the removal action, screening level evaluations of human health risks associated with Building 14 and former Building 13 soils were performed by comparing site-related contaminant concentrations to risk-based MCP residential soil standards (S-1/GW-1) (see Appendix C). Based on the screening level evaluations, the Army performed a CERCLA removal action pursuant to the FFA that achieved the risk-based MCP residential soil standards.

Based on confirmatory sampling after the removal action was complete, the site did not move to the RI phase. Therefore a baseline risk assessment was not performed. The confirmatory samples taken at the excavation site were below MCP action levels and within CERCLA levels acceptable to EPA, as shown in the Appendix C.

12.2.1 Basis for Remedial Action at Building 14 and Former Building 13

The soil removal action removed the soils exceeding standards. Based on the results of the confirmation sample results, No Further Action is necessary at the Building 14 and Former Building 13 soil.

12.3 SUMMARY OF POTENTIAL RISKS AT THE BOILER PLANT

The risks discussed in this section are related to soil only. Potential risks associated with ground water and sediment exposures are addressed in separate decision documents.

A removal action was conducted in 2007 to address contaminated soil that exceeded MCP residential soil standards in two areas identified during the Site Investigation. A total of approximately 768 cubic yards of contaminated soil was removed from the excavation.

After the removal action, screening level evaluations of human health risks associated with Boiler Plant Area were performed by comparing site-related contaminant concentrations to risk-based MCP residential soil standards (S-1/GW-1) (see Appendix C).

Based on confirmatory sampling after the removal action was complete, the site did not move to the RI phase. Therefore a baseline risk assessment was not performed. The confirmatory samples taken at the excavation site were below MCP action levels and within CERCLA levels acceptable to EPA, as shown in the Appendix C.

12.3.1 Basis for Remedial Action at the Boiler Plant

The soil removal action removed the soils exceeding standards. Based on the results of the confirmation sampling and screening-level HHRA, No Further Action is necessary at the Boiler Plant soils.

13.0 DOCUMENTATION OF SIGNIFICANT CHANGES FROM PREFERRED ALTERNATIVE OF PROPOSED PLAN

The Army released a Proposed Plan for remedial action for soil the T-25 Area, Building 14 and Former Building 13, and Boiler Plant on April 17, 2008. The Proposed Plan identified No Further Action as the Preferred Alternative for the soil at the T-25 Area, Building 14 and Former Building 13, and Boiler Plant. During the public comment period, the Army received one (1) comment.

There have been no significant changes made to the preferred alternative for the soil at the T-25 Area, Building 14 and Former Building 13, and Boiler Plant presented in the Proposed Plan.

14.0 STATE ROLE

MADEP has reviewed this Record of Decision and has indicated its support for the selected remedies. The Commonwealth of Massachusetts has reviewed the Site Investigation, RI, supplemental RI, and Removal Action Completion Reports associated with the T-25 Area, Building 14 and Former Building 13, and Boiler Plant to determine if the selected remedies are in compliance with applicable or relevant and appropriate State environmental and facility citing laws and regulations.

PART 3: RESPONSIVENESS SUMMARY

15.0 RESPONSIVENESS SUMMARY

This Responsiveness Summary has been prepared to meet the requirements of Sections 113(k)(2)(B)(iv) and 117(b) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), which requires response to "... significant comments, criticisms, and new data submitted in written or oral presentations" on a proposed plan for remedial action. The purpose of this Responsiveness Summary is to document the Army's responses to questions and comments expressed during the public comment period by the public, potentially responsible parties, and governmental bodies in written and oral comments regarding the Proposed Plan for soil at the T-25 Area, Building 14 and Former Building 13, and Boiler Plant (Operable Unit 4) at the U.S. Army Natick Soldier Systems Center, Natick, Massachusetts.

On March 30, 2008, April 3, 2008, and April 10, 2008 the Army published a public notice announcing the Proposed Plan, the date for a public informational meeting, and the start and end dates of a 30-day public comment period in the MetroWest Daily News, a local newspaper with a daily circulation of over 28,000 issues and over 42,000 issues on Sundays. The Army made the Proposed Plan available to the public at the public meeting, by request from NSSC's Public Affairs Officer, or at the information repositories.

From April 17 through May 18, 2008, the Army held a 30-day public comment period to accept public comments on the Proposed Plan and on other documents released to the public. On April 17, 2008, the Army held an informal public information meeting at the Frederick Conley Public Safety Training Center located at 20 E Central Street in Natick to present the Army's Proposed Plan to the public and to provide the opportunity for open discussion concerning the Proposed Plan. The Army also accepted formal verbal or written comments from the public during the public hearing held as part of the meeting. A transcript of the hearing and formal public comments are appended (Appendix D) to this Record of Decision.

This Responsiveness Summary is organized into the following sections:

1. **Overview of the Selected Remedies.** This section briefly outlines the basis for the Army's selected remedy.
2. **Background on Community Involvement.** This section provides a brief history of community involvement and Army initiatives to inform the community of site activities.
3. **Summary of Comments Received During the Public Comment Period and Army responses.** This section provides Army responses to verbal and written comments received from the public. A transcript of the April 17, 2008, public hearing is included as Appendix D to this Record of Decision.

15.1 OVERVIEW OF THE SELECTED REMEDIES

15.1.1 Selected Remedy for the T-25 Area Soil

The T-25 Area is a 15.6-acre, rectangular plot located in the northwestern portion of the NSSC facility. The area has a baseball field in the northwest corner and otherwise is mostly covered with buildings or paved with asphalt. The area is circled by an unpaved road and embankment. The site was formerly a gravel pit owned by the town of Natick before being developed by the Army in the 1950s.

Between 1970 and 1989, the T-25 Area was used to store bulk waste and drums of petroleum, solvents, and pesticides. Due to contamination found in the T-25 Area ground water and the proximity of the site to the Town of Natick's Springvale Well Field, NSSC was added to the NPL in 1994. Past and present operations within the T-25 Area have included: storage of bulk waste and chemicals; laboratory research; clothing and textile research; drop-testing; and garage operations.

A Phase I RI for the T-25 Area was completed in 1996, a Phase II RI was completed in 1998, and a Supplemental RI for soil was completed in 2007. This ROD focuses only on the soil associated with the T-25 Area. Ground water remediation is being managed as OU-1 under independent agreements. The T-25 Area Phase I RI and Phase II RI conducted in the 1990s indicated that surface and subsurface soils within the Storage Area, which was used for outdoor storage of bulk waste, were contaminated with pesticide (chlordane, DDT, and DDD) and PAH at concentrations exceeding MCP S-1/GW-1 residential soil standards. The MCP residential soil standards are developed to be protective of public health in a residential, frequent-contact scenario. Concentrations of pesticides (particularly chlordane) exceeded residential standards by up to 50 times, while concentrations of PAHs exceeded standards by up to 5 times. Based on this information, the Army performed a removal action between October and December of 1997 to address the pesticide-contaminated soil at the Storage Area. Approximately 1,380 tons of contaminated soil were excavated, transported, and disposed of at a licensed off-site landfill. Soil was excavated over a 2,400-square-foot area at depths of up to 10 feet. Confirmation soil samples were collected from the excavation and analyzed at an off-site laboratory for pesticides and PAHs. No compounds were detected at concentrations above the cleanup action levels, which were the MCP S-1/GW-1 residential soil standards. The Storage Area excavation was backfilled with clean soil, compacted, and paved.

In December 2006, the kerosene-impacted soil adjacent to MW-2 was excavated in conjunction with the replacement of an oil-water separator discharge line. The excavation, performed in accordance with MCP guidance, was approximately 6 to 8 feet long, 5 feet wide, and 4.5 feet deep. Confirmation soil samples were collected and screened for petroleum products. The confirmation screening results and visual/olfactory evidence indicated that there was no residual kerosene soil contamination in the vicinity of MW-2. The excavation was backfilled with clean soil, compacted, and paved.

Human health risk assessments were performed in the 1990s as part of the Phase I and Phase II RI. Potential receptors for soil at the T-25 Area included: facility employees using the ball field; trespassers on the ball field; residents near the site potentially exposed to windblown dust from the

ball field; and, construction workers in the T-25 Area. These assessments did not identify any unacceptable health risks due to exposure to site-related contaminants in soil at the T-25 Area. The removal action performed at the Storage Area eliminated soil pesticide concentrations exceeding residential standards.

The Supplemental RI performed in 2007 evaluated human health risks potentially associated with soil data collected since the completion of the Phase II RI. The Supplemental RI confirmed the conclusions from the Phase I/II risk assessments, and recommended that no further action was required to address the T-25 Area soil.

Minimal ecological risks were identified for soil at the T-25 Area; however the incremental risks were deemed ecologically insignificant because the contaminant concentrations were similar to background levels and the area is highly localized and a low quality terrestrial habitat for animals.

There is no CERCLA risk because the COCs have been removed from the site, and the concentrations of chemicals remaining in soil at the site are below levels of concern. The selected remedy for the T-25 Area soil is No Further Action.

15.1.2 Selected Remedy for Building 14 and Former Building 13

Building 14 and former Building 13, both constructed in 1954, are located in the western portion of the NSSC facility. Building 14 is a two-story concrete structure which has been and still is used for vehicle and equipment maintenance, administrative space, and storage. Building 13 was used as an incinerator for destroying classified paperwork since its installation in 1954 until its closure in 1985. The aboveground structure and stack were removed in the late 1990s, leaving the concrete foundation. Building 13 was also used to decontaminate pesticide equipment and clean garbage cans. Currently, there are two 2,000-gallon underground storage tanks (UST), one gasoline and one diesel, located to the northeast of Building 14 where vehicle refueling occurs.

Contaminated soil containing PAHs exceeding MCP S-1/GW-1 residential soil standards was removed during the early 1990s, as were two USTs. Later, in 1998, during the installation of an oil-water separator north of Building 14, additional soil contaminated with PAHs was detected. In 2004, an SI was performed at Building 14 and former Building 13 to evaluate the extent of the soil and ground water contamination. Extensive soil and ground water samples were collected and analyzed, and results indicated two main areas of contamination at the site. The first area included the surface soil (0 to 1 foot below ground surface) surrounding former Building 13, which was contaminated with petroleum hydrocarbons, one pesticide (dieldrin), and metals in excess of MCP residential soil standards. Concentrations of petroleum hydrocarbons exceeded residential standards by up to 40 times, and concentrations of dieldrin exceeded standards by up to 2 times. Metals concentrations (particularly beryllium) were only slightly higher than standards. The second area included the subsurface soil (up to 15 feet deep) just south of Building 14, which was contaminated with petroleum hydrocarbons and VOCs above MCP residential soil standards. Concentrations of these subsurface soil contaminants exceeded residential standards by up to 170 times.

In 2007, a removal action was conducted to address contaminated soil that exceeded MCP residential soil standards in the two areas. At former Building 13, a portion of the concrete incinerator foundation and associated piping were demolished. Approximately 75 percent of the sub grade footing for the flue stack and the gas line concrete enclosure were left in place due to concerns with the stability of the steep slope to the south of the excavation. Surface soil in a 3,300 ft² area surrounding the foundation was excavated to a depth of one foot. At the Building 14 area, soil was excavated over a 1,260 ft² area at depths ranging up to 15 feet. A total of 257 tons of soil was removed from the Building 13 excavation and 635 tons of soil was removed from the Building 14 excavation.

Confirmation samples were collected from both excavations. All confirmation samples were analyzed for PAHs and samples from the former Building 13 area were additionally analyzed for pesticides, PCBs, and metals. No compounds were detected at concentrations above the cleanup action levels, the MCP S-1/GW-1 residential soil standards. Both excavations were backfilled with clean soil and compacted. The Building 14 area was repaved and the former Building 13 area was hydroseeded.

Evaluations of human health risks associated with Building 14 and former Building 13 soil were performed by comparing site-related contaminant concentrations to the MCP residential soil standards. Several contaminants detected in soil samples from these areas exceeded the MCP S-1/GW-1 standards. However, during the 2007 soil removal action at Building 14 and former Building 13 soil exceeding these standards was removed; therefore potential human health risks potentially associated with this soil has been eliminated. Minimal ecological risks are likely for the areas surrounding both Buildings 13 and 14, as they do not constitute a significant terrestrial habitat.

There is no CERCLA risk because the contaminants of concern have been removed from the site, and the concentrations of chemicals remaining in soil at the site are below levels of concern. The selected remedy for the Building 14 and former Building 13 soil is No Further Action.

15.1.3 Selected Remedy for the Boiler Plant

The Boiler Plant site is located in the southwest portion of the NSSC facility. It covers a 1.8-acre area and is located on a small south-facing peninsula on the South Pond of Lake Cochituate. The site includes Building 19, the former Building 23 area, and the former piggery. Building 19 is a boiler plant, still in operation, which is used to generate heat for NSSC buildings. From 1950 until 1982, the room in the southwestern corner of the basement of Building 19 was used as a pesticide storage and mixing area. A leach field was also present to the south of Building 19. Building 23 was a former pump house (removed in 2001) that was constructed to supply water to the boiler plant. The former piggery was located southwest of Building 19 and was used for housing and feeding pigs used at NSSC for research.

Prior to the initiation of the Phase I and Phase II SI, two non-CERCLA removal actions were performed at the Boiler Plant site to remove contaminated soil, in 1990, when approximately 1,200 to 1,500 cubic yards of fuel-contaminated soil were removed, and in 1995 to remove an additional 4 cubic yards of oil-stained soil.

In 1996, a Phase I SI was conducted in which soil and ground water samples downgradient of Building 19 were collected and analyzed for a wide range of chemicals. The results indicated the presence of several PAHs, pesticides, and one PCB in soil within 4 feet below ground surface. PAHs were detected at concentrations above Massachusetts RCs. In 1999, a Phase II SI included the collection and analysis of additional soil and ground water samples. The results indicated the presence of PAHs, PCBs, and lead in soil exceeding MCP residential soil standards near Building 19 in the vicinity of the leach field. Maximum concentrations of PAHs exceeded residential standards by up to 43 times, PCBs exceeded standards by up to 1.5 times, and lead exceeded standards by up to 2.8 times.

In 2001, the Army addressed the contamination detected during the SI by excavating and removing soil that exceeded MCP S-1/GW-1 residential soil standards. Confirmation samples collected from the excavation confirmed that contaminants in excess of MCP residential soil standards had been successfully removed. The excavation area was backfilled with clean fill, compacted, and paved. Risk assessments conducted in 2003 concluded that there was no significant risk of harm to health, public welfare, or the environment under current and foreseeable future use conditions at the Boiler Plant site, based on comparisons to the applicable MCP standards. A Stage I (MCP) environmental screening determined that there are no known threatened or endangered terrestrial species, the site contains less than two acres of potentially affected, undeveloped habitat, and there is no suitable terrestrial habitat for terrestrial receptors. Therefore, the environmental screening concluded that there is no significant risk of harm to terrestrial ecological receptors at the Boiler Plant Site. There is no CERCLA risk because the contaminants of concern have been removed from the site, and the concentrations of chemicals remaining in soil at the site are below levels of concern. The selected remedy for the Boiler Plant area soil is No Further Action.

15.2 BACKGROUND ON COMMUNITY INVOLVEMENT

Notice of the availability of the Proposed Plan for the T-25 Area soil, Building 14 and Former Building 13, and Boiler Plant was published in The MetroWest Daily News on March 30, 2008, April 3, 2008, and April 10, 2008. A public informational meeting and hearing on the proposed plan was held at the Frederick Conley Public Safety Training Center in Natick on April 17, 2008, and a public comment period was held from April 17 through May 18, 2008. At the public meeting, the Army presented the Proposed Plan and answered questions from the public prior to providing opportunity for formal comments on the proposed plan. The Army made the Proposed Plan available to the public at the public meeting or by request from NSSC's Public Affairs Officer. Comments received during the public comment period and the Army's responses are contained in Appendix D to this Record of Decision.

In addition, the community has been kept advised of investigative and cleanup activities at the T-25 Area soil, Building 14 and Former Building 13, and Boiler Plant through presentations by the Army at Restoration Advisory Board meetings held, following public notice, on an approximate quarterly basis throughout the year.

All supporting documentation for the decision regarding the soil at the T-25 Area, Building 14 and Former Building 13, and Boiler Plant is contained in the Administrative Record for review. The Administrative Record is a collection of all the documents considered by the Army in choosing the

plan of action for the soil at the T-25 Area, Building 14 and Former Building 13, and Boiler Plant. On April 17, 2008, the Army made the Administrative Record available for public review at the NSSC and at the Morse Institute Library located at 14 East Central Street in Natick, Massachusetts. An index to the Administrative Record is available at the NSSC and is provided as Appendix B of this Record of Decision.

15.3 SUMMARY OF COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD AND ARMY RESPONSES

The Army received verbal comments from one person during the public hearing on April 17, 2008. No written comments were received at the hearing or during the remainder of the public comment period. The following summarizes the one public hearing comment and the Army's response.

1. Public Hearing Comment from Marco Kaltofen (Community co-chair of the Restoration Advisory Board)

Comment No. 1:

My name is Marco Kaltofen and I reside at 5 Water Street in Natick. I'd like to take the opportunity to thank the Army and their contractors for the good work that they did in resolving the soil issue. I certainly agree with the no further action decision of the soils.

You all actually know me here. You know I reserved judgment and I'm not saying that about our ground water and sediment issues. I look forward to the additional work that will get done in those areas in the future. Thank you.

Response No. 1:

Comment noted.

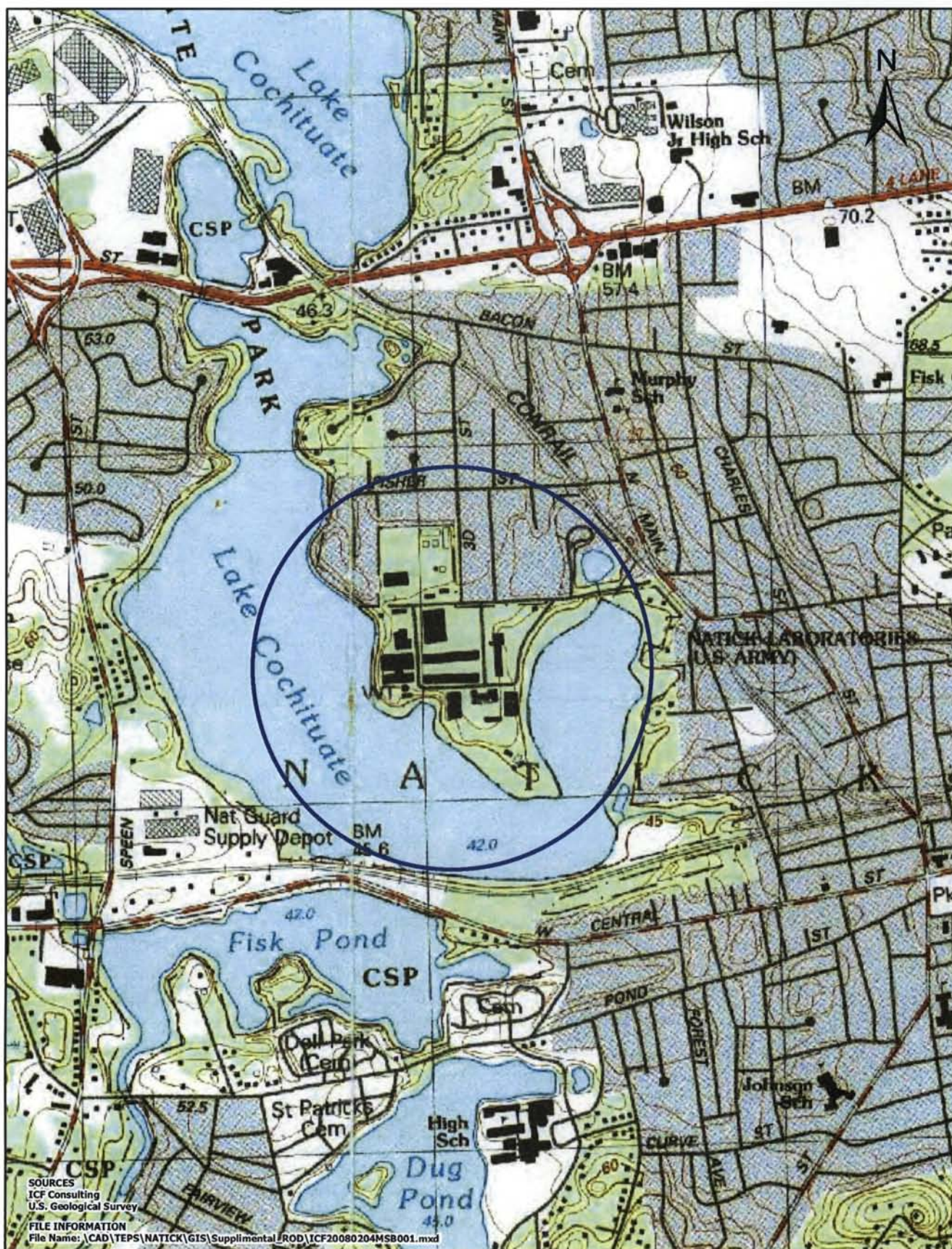
REFERENCES

- Arthur D. Little, Inc. 1996. *Phase I Remedial Investigation Report, T-25 Area at the U.S. Army Natick Research Development, and Engineering Center (Natick), Natick, Massachusetts*, prepared for U.S. Army Environmental Center, Aberdeen Proving Ground, Maryland; August.
- Arthur D. Little, Inc. 1998. *Final Phase II Remedial Investigation Report, T-25 Area at the U.S. Army Soldier Systems Command (SSCOM) Natick, Massachusetts*. December 1998.
- Argonne National Laboratory. 1993. *Master Environmental Plan*; prepared for the U.S. Army Natick Research, Development and Engineering Center; Natick, Massachusetts; January 1993.
- Dames & Moore. 1991. *Final Expanded Site Inspection (ESI) of Natick Research, Development, and Engineering Center*, prepared for U.S. Army Toxic and Hazardous Materials Agency, Aberdeen Proving Ground, Maryland; prepared by Dames & Moore, Bethesda, Maryland; March 1991.
- Dames & Moore, Inc. 1992. *Addendum Expanded Site Inspection (ESI) of Natick Research, Development and Engineering Center*. January.
- Haley & Aldrich. 2002. *Report on Proposed North Campus Stormwater Drainage System, U.S. Army Soldier Systems Command, Natick, Massachusetts*, prepared for Dewberry-Goodkind Inc., Boston, Massachusetts. June.
- Harding Lawson Associates. 1998. *Draft Final Work Plan Boiler Plant, Former Hazardous Materials Storage Building, Former Piggery, and Building T-23*, September, 1998.
- Harding ESE, Inc. 2001. *Release Abatement Measure Completion Report, Boiler Plant Site Soldier Systems Center, Natick, Massachusetts*. October 2001.
- Harding ESE, Inc. 2003. *Phase II Site Investigation Report Boiler Plant Site Soldier Systems Center Natick, Massachusetts, Final, Volume I Text, Figures, Tables*, September 2003.
- ICF Consulting, Inc. 2003. *Final Work Plan, Building 14 and Former Building 13 Site Investigation/Remedial Investigation. U.S. Army Soldiers Systems Center (SSC), Natick, Massachusetts*. March.
- ICF Consulting, Inc. 2004. *Final Site Investigation Report, Building 14 and Former Building 13, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts*. September.
- ICF Consulting, Inc. 2005. *Final Site Investigation Report Addendum, Building 14 and Former Building 13, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts*. July.
- ICF International. 2007. *First Five-Year Review Report for U.S. Army Soldier Systems Center (SSC), Town of Natick, Middlesex County, Massachusetts*
- ICF International. 2008a. *Final Removal Action Completion Report, Building 14 and Former Building 13, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts*. January 17, 2008
- ICF International. 2008b. *Final T-25 Area Supplemental Remedial Investigation, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts*. January 28, 2008

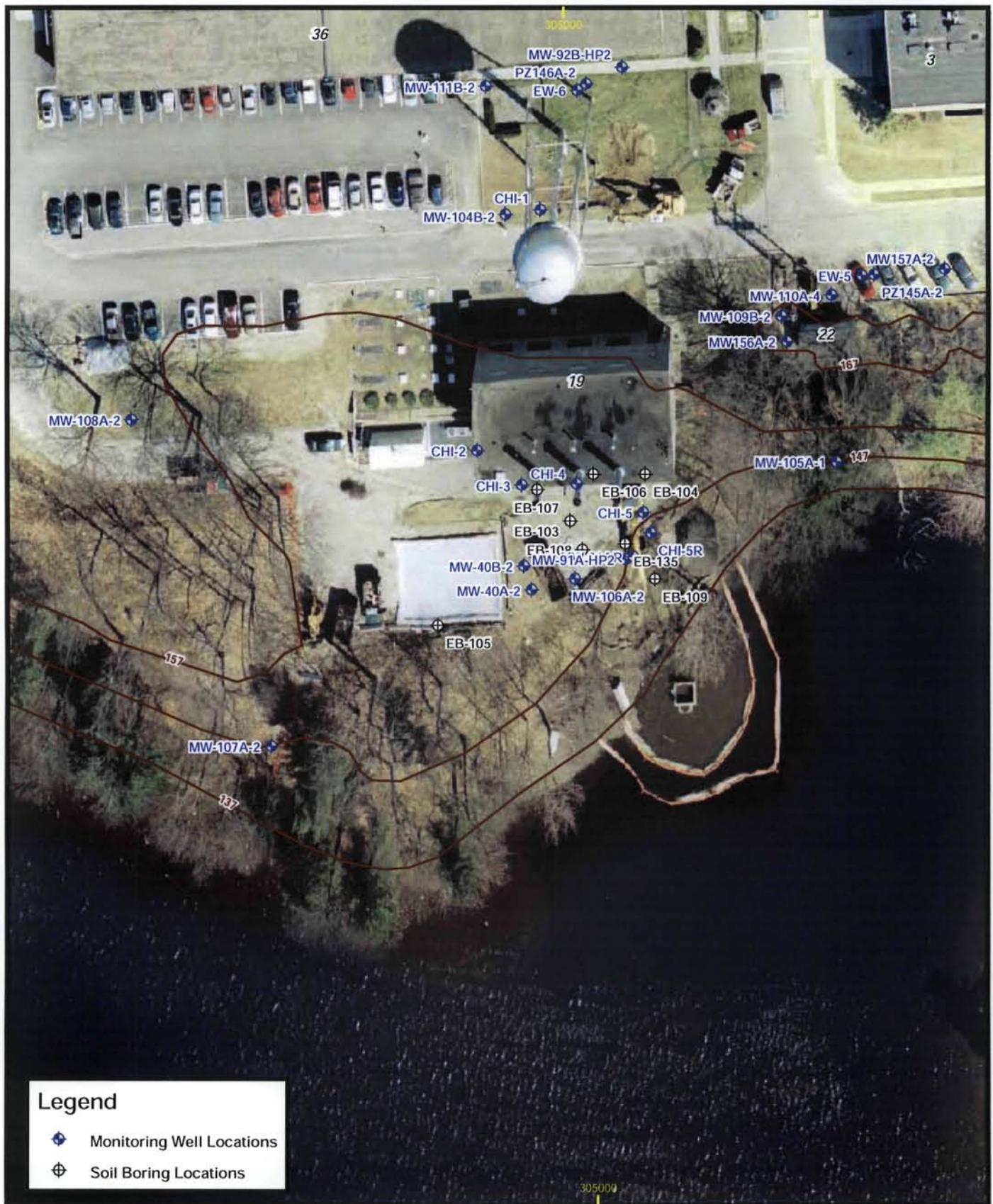
- Mactec Engineering and Consulting, Inc. 2004. *Summary of Environmental and Geotechnical Exploration, T-25 Area, Soldier Systems Center, Natick, Massachusetts*. 2004.
- Mactec Engineering and Consulting, Inc. 2007. *Memorandum: Soil Headspace Screening at MW-2*. January 2007.
- Massachusetts Department of Environmental Protection. 2006. *Massachusetts Contingency Plan*, 310 CMR 40.000. 2006.
- Northeast Research Institute, Inc. 1989. *Final Report, Petrex Soil Gas Survey Conducted at the U.S. Army Research, Development, and Engineering Center in Natick, Massachusetts*. October.
- Northeast Research Institute, Inc. 1990. *Phase II Soil Gas Survey Conducted at the U.S. Army Research, Development, and Engineering Center in Natick, Massachusetts*. April 1990.
- Rizzo Associates, Inc. 1996. *Phase I—Initial Site Investigation, Boiler House*. Prepared for U.S. Army Soldier Systems Command, Natick, Massachusetts. December.
- U.S. Army Toxic and Hazardous Materials Agency. 1980. *Installation Assessment of U.S. Army Natick Research and Development Command, Report No. 170*. May 1980.
- U.S. Army Toxic and Hazardous Materials Agency. 1992 *Addendum Expanded Site Investigation (ESI) of Natick Research, Development, and Engineering Center*. January 1992.
- U.S. Environmental Protection Agency. 1990. *National Oil and Hazardous Substances Pollution Contingency Plan*; 40 CFR Part 300; March 1990.
- U.S. Environmental Protection Agency. 1995. *USEPA Region III Risk-Based Concentration (RBC) Table*. USEPA Region III; April.
- U.S. Environmental Protection Agency. 1996. *Integrated Risk Information System (IRIS)*; on-line database.
- U.S. Environmental Protection Agency. 2004. *Preliminary Remediation Goals (PRG) Table*; US EPA Region IX Office of Solid Waste and Emergency Response, October, 2004.
- U.S. Environmental Protection Agency. 2006. *U.S. Department of the Army Natick Laboratory Army Research D&E Center (Soldier Systems Center), Natick, Massachusetts, Federal Facility Agreement Under CERCLA Section 120*. August, 2006.
- Weston. 1999. *Storage Area Removal Action T-25 Area, U.S. Army Soldier Systems Command, Natick, MA. Final Removal Action Report, Delivery Order No. 0018, DCN: SSC-0219999-AABB*. February.

FIGURES

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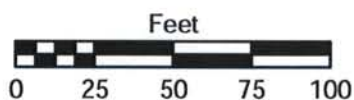
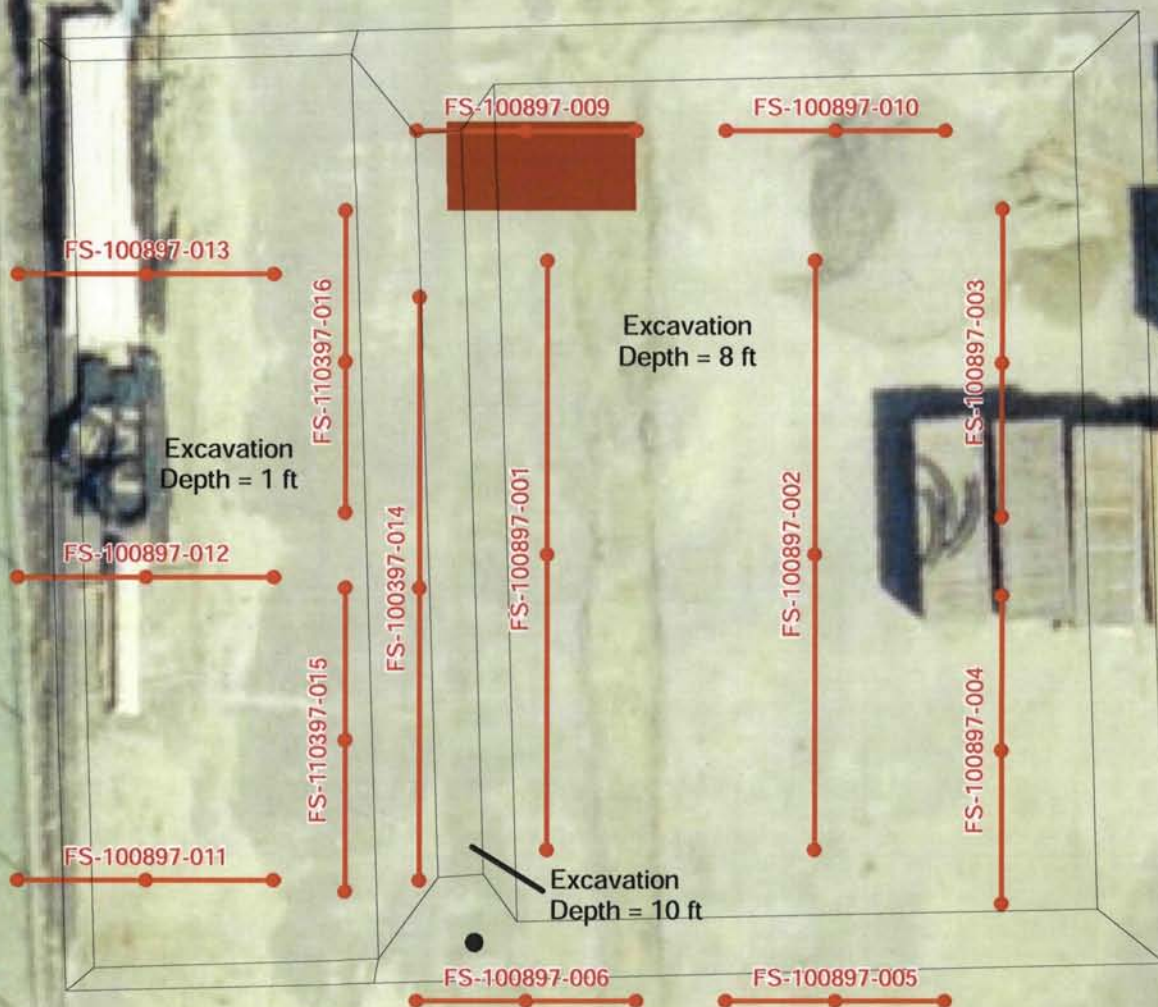
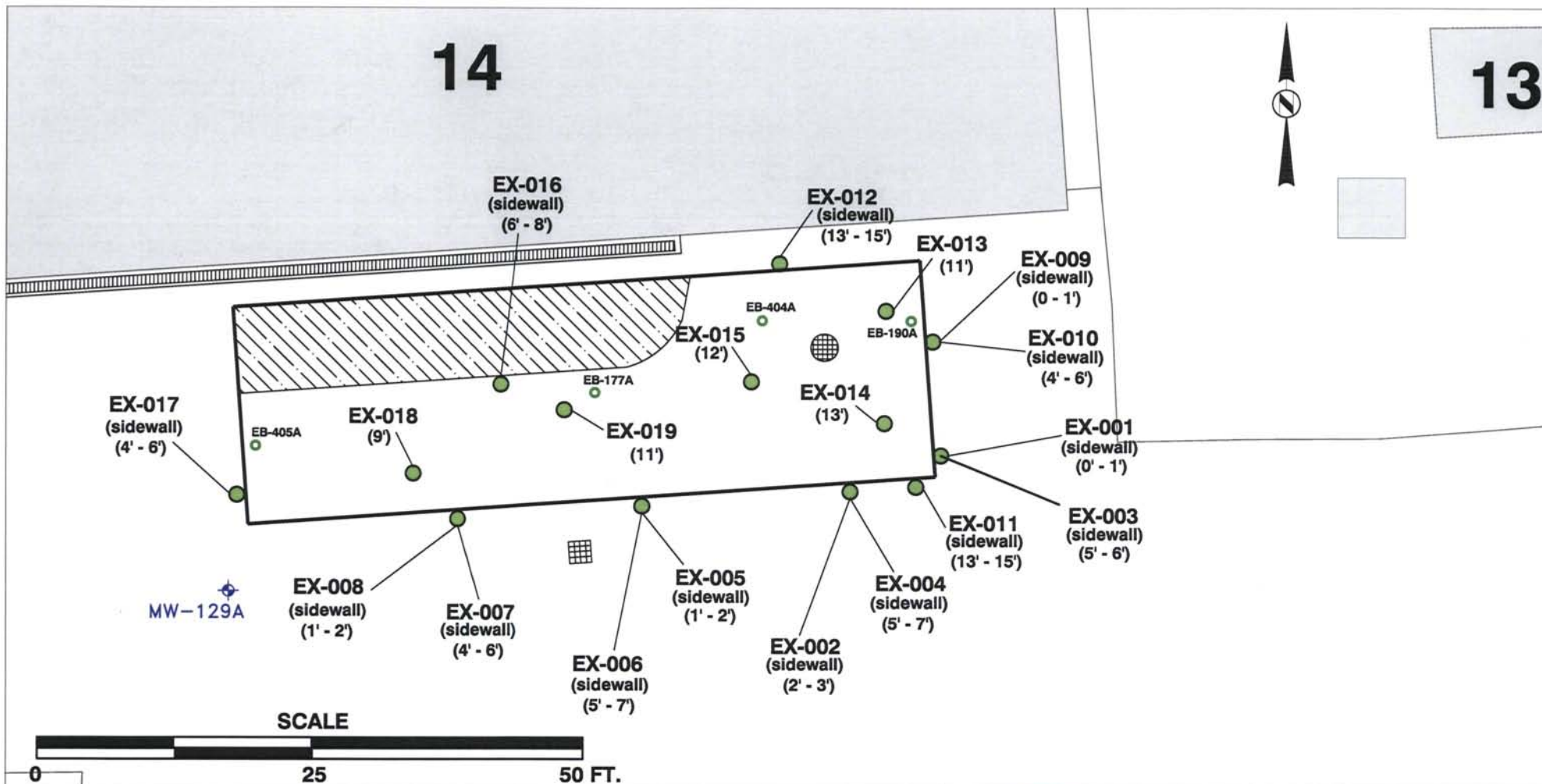


Figure 6-4
Boiler Plant Building 19
Location Map



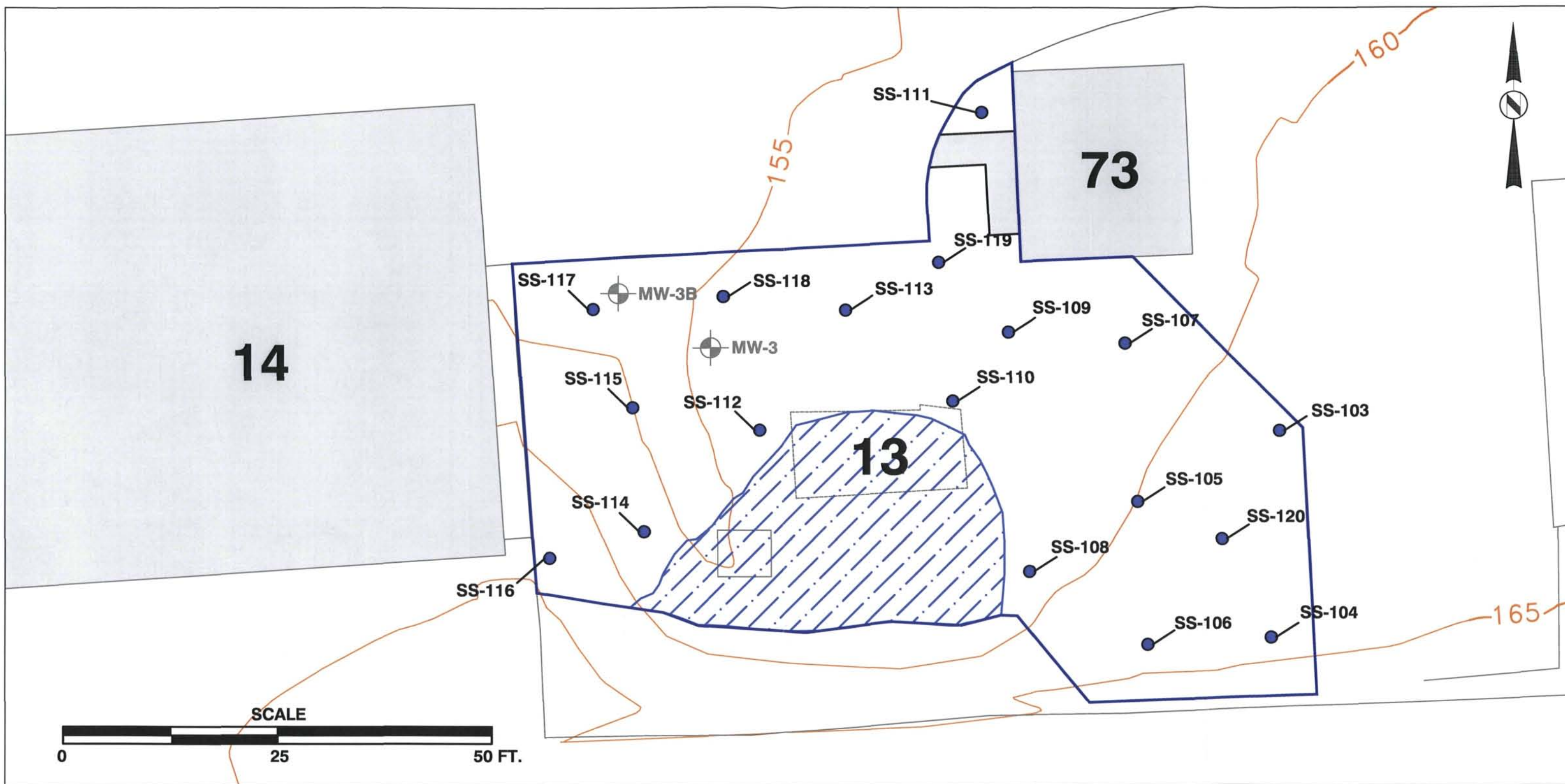
Legend

- Chlordane Storage Area Composite Sample Locations
- SA 2 Tank Location
- GPS Locations



- LEGEND**
- = Confirmatory Soil Sample
 - EB-405A = Site Investigation Soil Boring Location Exceeding MCP S-1/GW-1 Standards
 - = Limits of Excavation (approx. 1,260 sq. ft.)
 - ▨ = Area Excavated to 4 Feet with a 2:1 Slope
 - ⊕ = 2004 Supplemental SI Monitoring Well

ICF INTERNATIONAL		FIGURE 7-2 BUILDING 14 EXCAVATION LIMITS AND CONFIRMATORY SOIL SAMPLE LOCATIONS BUILDING 14 AND FORMER BUILDING 13 REMOVAL ACTION SOLDIER SYSTEMS CENTER, NATICK, MASSACHUSETTS	
		APPROVALS DRAWN: SJR CHECKED: MJB QA/CONTROL: THC TECH REVIEW: WGL PROJ MGR: KJP	DATE 3/07 3/07 3/07 3/07 3/07
PREPARED FOR SSC		DATE MARCH 2007	SCALE AS SHOWN
SOURCE ICF INTERNATIONAL		DWG. NO. 035004-040r	
		SHEET 1 OF 1	



LEGEND

- = Confirmatory Soil Sample
- = Topographic Contour Elevation (Feet AMSL)
- = Limits of Excavation (approx. 4,075 sq. ft.)
- = Limits of Former Building 13 Backfilled
- + = Existing Monitoring Well

ICF
INTERNATIONAL

APPROVALS		DATE
DRAWN	SJR	3/07
CHECKED	MJB	3/07
QA/CONTROL	THC	3/07
TECH REVIEW	JH	3/07
PROJ MGR	KJP	3/07

FIGURE 7-3 BUILDING 13 EXCAVATION LIMITS AND CONFIRMATORY SOIL SAMPLE LOCATIONS			
BUILDING 14 AND FORMER BUILDING 13 REMOVAL ACTION SOLDIERS SYSTEMS CENTER, NATICK, MASSACHUSETTS			
PREPARED FOR		SSC	SCALE AS SHOWN
DATE		MARCH 2007	DWG. NO. 035004-042r
SOURCE		ICF INTERNATIONAL	SHEET <u>1</u> OF <u>1</u>



APPENDIX A
DECLARATION OF STATE CONCURRENCE



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner

August 15, 2008

Mr. James T. Owens, Director
Office of Site Remediation
U.S. EPA
JFK Federal Building
Boston, MA 02203

Re: State Concurrence with Record of Decision
Army Soldier Systems Biological and Chemical Command (Natick Labs)
For Soil at the T-25 Area, Building 14, Former Bldg. 13, and Boiler Plant
(Operable Unit 4)
Natick, MA

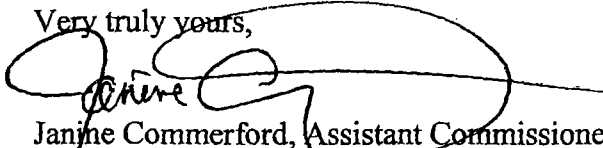
Dear Mr. Owens:

The Department of Environmental Protection (MassDEP) has reviewed the selected remedy recommended by the U.S. Environmental Protection Agency (EPA) for the cleanup of the Army Soldier Systems Biological and Chemical Command (Natick Labs) for Soil at the T-25 Area, Building 14, Former Bldg. 13, and Boiler Plant (Operable Unit 4). The Department concurs with the selection of the remedy as presented in the Record of Decision.

The selected remedy addresses contamination of soil in the Operable Unit 4. The remedy selected is No Further Action owing to the remedial actions previously conducted. The selected remedy also meets applicable or relevant and appropriate state requirements for the selected remedy.

The Department looks forward to continued cooperation with EPA as work progresses for other activities at this site. If you have any questions regarding this letter, please contact Robert Campbell at 292-5732.

Very truly yours,


Janine Commerford, Assistant Commissioner
Bureau of Waste Site Cleanup
Department of Environmental Protection

APPENDIX B
ADMINISTRATIVE RECORD INDEX

IN

FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
WK Plan	1	Arthur D. Little Draft Plan for T-25	12/4/92	
Newspaper	2	Media Advisory	12/28/92	
WK Plan	3	Arthur D. Little Work Plan Scope of Work		
WK Plan	4	Draft Final WK Plan - THAMA	3/12/93	Superseded by 209
WK Plan	5	Draft Final QA Project Plan for T-25 - THAMA	3/17/93	
Correspond	6	Review of Draft WK Plan for T-25	3/17/93	
Corresp.	7	Draft Letter Report of HRS Score for NRDEC	5/3/93	
Corresp.	8	Public Affairs Announcement from EPA to Natick	5/7/93	
Newspaper	9	Tab: "Army Labs may make Superfund List"	5/9/93	
Corresp.	10	Agenda & Summary of 9 th Technical Review (rec)	5/5/93	
Fed. Reg.	11	Federal Register - Proposed Rules	5/10/93	
Newspaper	12	"EPA targets" & "2 MA Sites Cited as Hazards"	5/11/93	
Newspaper	13	"EPA may speed up Army Labs Clean-up"	5/12/93	
Corresp.	14	EPA Proposed listing of NPL Candidates	5/18/93	
Analytical	15	Environmental Sampling Technology (EST)	5/19/93	
Analytical	16	Water Quality Field Sampling Data Sheet	5/23/93	
Analytical	17	Revet Labs - Chain of Custody	5/93	
Analytical	18	Revet Labs - Chain of Custody	5/93	
Contacts	19	Irene Kessel - Natick Resident	5/20/93	
Contacts	20	Board of Selectmen - moree Fleming	5/27/93	

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Correspond	21	Review of Final Haz. Ranking System - EPA	5/10/93	
Correspond	22	Request for Natick to process Purge Water	6/2/93	
Correspond	23	Final Haz. Ranking System Package from THANA	6/7/93	
Corresp.	24	Comments to Haz. Ranking System - Natick	6/8/93	
Analytical	25	Revet Lab Results	6/11/93	
Corresp.	26	Submission of Final Letter Report of HRS - ETA	6/21/93	
Corresp.	27	Receipt of Haz. Ranking Binders - Natick Lib.	6/22/93	
	28	Final Haz. Ranking System from EPA	6/24/93	
Contacts	29	Roger Wade - Dir., Board of Health	6/25/93	
Corresp.	30	Briefing given by Kim Walters @ Natick	5/18/93	
Newspaper	31	EPA wants to add 4 more NE sites to Superfund	6/23/93	
Newspaper	32	Mistakes made by the Lake-Tap	6/30/93	
Correspondence	33	from Environmental Coalition of Natick	7/6/93	
Corresp.	34	Natick Installation Restoration Program Mtg Agenda	7/28/93	
Corresp.	35	Sampling of Natick Population - Survey	7/29/93	
Wk Plan	36	US Army Corps Engineers - Final Community Relations	7/29/93	
News Release	37	PAO - News Release, Neighborhood Advisory	8/20/93	
Contacts	38	WKOK - Gene Molter & Middlesex News	8/27/93	
Correspond	39	Letter to Mrs. Coverly - Natick Library	9/10/93	
Correspond	40	Letter to Roger Wade - Natick Board of Health	9/10/93	

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Newspaper	41	Middlesex News - Natick's contaminated wells	9/13/93	Sharon Curran
Corresp	42	To: David LaPisata - DEP, Woburn - Purge + 60	9/20/93	Sharon Curran
Corresp.	43	To: David Tordoff / Don Grant, EPA RE: NPDES Permit	9/20/93	Sharon Curran
CORRESP	44	Examples of Notice of Availability	12/3/93	John Manning
Newspaper	45	Middlesex News - EPA to make decision on Nhaba site	1/3/93	Patty Carriqueo
Corresp	46	DEP Permit to Process Potable Water	1/10/93	John Manning
Corresp	47	" " " " DO Pumped & Process Pump ^{Water}	1/10/93	John Manning
Corresp	48	EPA Permit Exclusion for Potable Water & Pump Water	1/10/93	John Manning
Newspaper	49	Middlesex News - EPA to make decision on Nhaba site	1/10/93	John Manning
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97	97	97	97	97	97
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IN

FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Comes	81	Stratton Smithy 2nd Floor	1/7/94	J. D. Dorman
Comes	82	Stratton Smithy 2nd Floor	1/7/94	J. D. Dorman
Comes	83	Stratton Smithy 2nd Floor	1/7/94	J. D. Dorman
Comes	84	Stratton Smithy 2nd Floor	1/7/94	J. D. Dorman
Comes	85	The Lab: 2nd Floor	1/7/94	J. D. Dorman
Report	86	Photocoloric Analysis	9/12/94	J. D. Dorman
Report	87	Historical Photo Analysis	9/12/94	J. D. Dorman
Photo's	88	Photocoloric Analysis	9/12/94	J. D. Dorman
Photo	89	Historical Photo Analysis	9/12/94	J. D. Dorman
Comes	90	Stratton Smithy 2nd Floor	1/7/94	J. D. Dorman
Comes	91	Stratton Smithy 2nd Floor	1/7/94	J. D. Dorman
Comes	92	Stratton Smithy 2nd Floor	1/7/94	J. D. Dorman
Comes	93	Stratton Smithy 2nd Floor	1/7/94	J. D. Dorman
Comes	94	Stratton Smithy 2nd Floor	1/7/94	J. D. Dorman
Comes	95	Stratton Smithy 2nd Floor	1/7/94	J. D. Dorman
Comes	96	Stratton Smithy 2nd Floor	1/7/94	J. D. Dorman
Newspaper	97	Toxic Paradise: Can mustard gas & eagles co-exist?	12 Dec 94	C. Fitzgerald
Correspondence	98	Mr. Marco Kallafas - Reply	2 Dec 94	C. Fitzgerald
Correspondence	99	National Priorities hist Site	5 Dec 94	C. Fitzgerald
Corresp	100	Employee Open House Comments/Surveys	1 Apr 95	J. D. Dorman

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Newspaper	101	News: Dabs holding env open houses	4/10/95	[Signature]
Newspaper	102	News: Public Announcement for open House	4/11/95	[Signature]
Corresp	103	Letter from Cook State Park Advisory Committee	4/11/95	[Signature]
Corresp	104	EPA notification of TAC Growth Potential	4/11/95	[Signature]
Newspaper	105	TAB: Notice Dabs open up to residents	4/19/95	[Signature]
Newspaper	106	TAB: On the contamination trail	4/27/95	[Signature]
Corresp	107	Letter to Mr Carr - Resident of Natick	5/5/95	[Signature]
Corresp	108	Letter to C. Murphy - Resident of Natick	5/11/95	[Signature]
Corresp	109	Letter to Mr Gross - Resident of Natick	5/11/95	[Signature]
Corresp	110	Letter to Mr Bowdoin - Resident of Natick	5/12/95	[Signature]
Corresp	111	Letter to Ms Moore - Resident of Natick	5/12/95	[Signature]
Corresp	112	Letter to Mr Mackey - Resident of Natick	5/12/95	[Signature]
Corresp	113	Letter to Mr + Mrs Williams III - Residents	5/14/95	[Signature]
Corresp	114	Letter to Dr. Zeisler - Resident of Natick	5/22/95	[Signature]
Corresp	115	Community Selection Panel	5/30/95	[Signature]
Corresp	116	Letter to Ms Tutunx - Re: RAB Volunteer	5/30/95	[Signature]
Corresp	117	Letter to Potential RAB Members	5/30/95	[Signature]
Corresp	118	Community Interest Survey Form	5/30/95	[Signature]
Corresp	119	Volunteers for RAB as of 15 May 95	5/30/95	[Signature]
Corresp	120	Email from Darryl Cole - President	5/30/95	[Signature]

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Corresp	121	Ltr to Mrs Gombay - Resident of Natick	5/31/95	[Signature]
Corresp	122	Ltr to Ms. Pihleey - Resident of Natick	5/31/95	[Signature]
Corresp	123	Email from Marco Galtieri - Resident	5/31/95	[Signature]
Corresp	124	Ltr to Ms. Dwight - Resident of Natick	5/31/95	[Signature]
Corresp	125	Ltr to Mr. Howard - Resident of Natick	5/31/95	[Signature]
Corresp	126	Ltr to Mr. Bell - Resident of Natick	5/31/95	[Signature]
Corresp	127	Ltr to Mr. & Mrs. Van Speybroeck - Resident	5/31/95	[Signature]
Corresp	128	Ltr to Mr. Tytko - Resident of Natick	5/31/95	[Signature]
Corresp	129	Ltr to Spiegel's - Residents of Natick	5/31/95	[Signature]
Corresp	130	Email Response to Mr. Cole from HAO	6/2/95	[Signature]
Corresp	131	Ltr to Dr. Joshey - Resident of Natick	6/5/95	[Signature]
Corresp	132	Ltr to Mr. Zyskowski - Resident of Natick	6/5/95	[Signature]
Corresp	133	Ltr to Mr. & Mrs. Fitzgerald - Residents of Natick	6/6/95	[Signature]
Corresp	134	Community Interest Survey Forms Returned	6/20/95	[Signature]
Corresp	135	Response Cards Returned	6/20/95	[Signature]
Corresp	136	Resident Surveys	6/20/95	[Signature]
Corresp	137	Ltr to Mr. Janson Re: Pump Test	7/5/95	[Signature]
Corresp	138	Ltrs to Selected HAB Members	7/6/95	[Signature]
Corresp	139	Ltrs to Non-Selected HAB Candidates	7/6/95	[Signature]
Corresp	140	Ltrs to HAB Members Announcing the 1st HAB Meeting	7/20/95	[Signature]

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Corresp	141	Ltr from Mr. Jackson Re: Pump Test	7/24/95	[Signature]
Corresp	142	E-Mail response to Ms. Byrne from ESO	7/31/95	[Signature]
Corresp	143	Ltr to RAB Members Forwarding Package for First RAB Meeting	8/9/95	[Signature]
Corresp	144	Ltr to Non-RAB Members Announcing First RAB Meeting	8/9/95	[Signature]
Corresp	145	SSCOM's Employee RAB Members	8/11/95	[Signature]
Corresp	146	Media Advisory on 1st RAB Meeting	8/16/95	[Signature]
Corresp	147	First RAB Sign-In Sheet	8/17/95	[Signature]
Corresp	148	Conflict of Interest Statements from RAB Members	8/17/95	[Signature]
Newspaper	149	News: Groundwater testing comes up empty at Natick Jobs site	8/17/95	[Signature]
Newspaper	150	News: So far, tests haven't found source of spill at Natick Jobs	8/18/95	[Signature]
Newspaper	151	News: Correction to News Articles 149+150	8/21/95	[Signature]
Newspaper	152	Tab: Board begins Natick Jobs Cleanup Process	8/23/95	[Signature]
Newspaper	153	News: A forgotten bit of the future	8/24/95	[Signature]
Corresp	154	Agreement Statements from RAB Members	8/31/95	[Signature]

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Corresp	155	Ltr to RAB Members Forwarding Package for Second RAB Meeting	9/16/95	[Signature]
Corresp	156	Media Advisory on 2nd RAB Meeting	9/18/95	[Signature]
Corresp	157	2nd RAB Meeting Handouts	9/22/95	[Signature]
Corresp	158	Phase II Remedial Investigation Health and Safety Plan	10/11/95	[Signature]
Corresp	159	Media Advisory on 3rd RAB Meeting	10/18/95	[Signature]
Corresp	160	Water/Well Surveys	10/31/95	[Signature]
Corresp	161	Ltr to RAB Members Forwarding Package for Fourth RAB Meeting	11/6/95	[Signature]
Newspaper	162	News: Legal Notice - RAB Meeting	11/13/95	[Signature]
Newspaper	163	News: Meeting on Date Certificate Cleanup		[Signature]
Corresp		Jan 10	4/5/96	[Signature]
Corresp	164	Media Advisory on 4th RAB Meeting	4/5/96	[Signature]
Corresp	165	Ltr to Mr. Host Forwarding Response to His Questions	4/5/96	[Signature]
Corresp	166	Ltr to Mr. Chapa Summary Re: Mid-Phase 2 Work Efforts	4/9/96	[Signature]
Corresp	167	E-mail from Mr. Miller - Subj: RAB Comments	4/11/96	[Signature]

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Newspaper	168	News: Legal Notice - RAB Mtg - 11/31/96	1/18/96	[Signature]
Corresp	169	Media Advisory on 4th RAB Mtg	1/22/96	[Signature]
Newspaper	170	Tab: Legal Notice - DCR - International Waste Site Cleanup Process - Project Dignitary Statement of Paris	1/31/96	[Signature]
Newspaper	171	Tab: Votick Ops cleanup discussed	2/2/96	[Signature]
Newspaper	172	News: State Studies cancer rate	2/2/96	[Signature]
Corresp	173	Attr to Mr. Flynn Re: Env. Concerns	2/6/96	[Signature]
Corresp	174	4th RAB Sign-Tv Sheet + Public Questions	2/9/96	[Signature]
Corresp	175	Response to NHTS request for Sample Collection	2/16/96	[Signature]
Corresp	176	Attr from Mr. Keefe Re: Reactability Study Work Plan, T-2 Area at the U.S. Army SSCR	2/15/96	[Signature]
Corresp	177	Media Advisory on 5th RAB Mtg	2/22/96	[Signature]
Corresp	178	5th RAB Sign-Tv Sheet Agenda + Attach	2/23/96	[Signature]
Newspaper	179	News: Legal Notice - RAB Mtg - 3/14/96	2/29/96	[Signature]
Newspaper	180	Tab: Source Spots - State targets three as possible contaminants	3/6/96	[Signature]
Corresp	181	Attr to Mr. Keefe Re: Draft Phase II Community + response to EPA Comments + Draft Community Relations Plan - you	3/11/96	[Signature]

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IN

FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Corresp	182	Media Advisory on Sixth RAB Mtg	3/15/96	[Signature]
Newspaper	183	Maxis: Continued Notice of Ops Cleanup Takes Shape	3/19/96	[Signature]
Corresp	184	Media Advisory on 2nd En. Open House	3/21/96	[Signature]
Corresp	185	Ltr. from EPA and Assoc. Inc. Re: Discharge of Water from the Proposed Groundwater Decontamination + Cleanup System into Lake Cockituate Residential Swimming Area	3/7/96	[Signature]
Newspaper	186	Notice Bulletin: Ops Celebrate Earth Day	3/7/96	[Signature]
Newspaper	187	Notice Bulletin: Action Starting in Ops Cleanup	3/17/96	[Signature]
Newspaper	188	Cancer Study Still Under Wraps: MB	3/17/96	[Signature]
Corresp	189	Media Advisory on Seventh RAB Mtg	3/28/96	[Signature]
Corresp	190	Ltr. to RAB Members, EPA, NDEP Re: Review of Ground Water Model for SSCOM	3/30/96	[Signature]
Corresp	191	Ltr. to RAB Members Re: May RAB Mtg Minutes & Draft Agenda for June RAB Mtg	6/14/96	[Signature]

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Maximiser	193	Max 6: Dega Notice - FFB Mtg - 6/27/96	6/19/96	J. J. D. D.
Corresp	193	Attn to Mr. Fitzgerald re: Request to Comments on the Draft Testability Study Work Plan - Oct 95	6/27/96	J. J. D. D.
Corresp	194	Media Advisory on Eighth FFB Meeting	6/27/96	J. J. D. D.
Corresp	195	8th FFB Sign In Sheet	6/28/96	J. J. D. D.
Corresp	196	Attn to Mr. McHugh from Mr. Keck EPA re: Draft Community Relation Plan - Revision 1	6/28/96	J. J. D. D.
Corresp	197	Attn to Mr. McHugh from Mr. Keck EPA re: Draft Step 1 Type Classifier Test Design - March 1995	6/28/96	J. J. D. D.
Corresp	198	Attn to Mr. Campbell (M.D. Panel) Mr. Keck 2 pages Draft Action Memorandum on Strategic Issues	7/3/96	J. J. D. D.
Play	PP1	AIR Act of 1995 Part II	7/3/96	J. J. D. D.
Play	200	AIR Act of 1995 Part II	7/3/96	J. J. D. D.
		U.S. Army Soldier Stamp Commemorative (Security Notice, MFA)	7/12/96	J. J. D. D.

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
W/Phon	201	ADP Final Quality Assurance Project Plan - these IERT for 105 Area at SACM, MA	7/1/91	[Signature]
W/Phon	202	ADP Final Quality Assurance Project Plan - these IERT for 105 Area at SACM, MA	7/1/91	[Signature]
Corresp	203	Mr. to Mr. Campbell, MDEP and Mr. [unclear] EPA re: Final IERT for 105 Area at SACM, MA	7/1/91	[Signature]
Corresp	204	8th PCB Meeting Minutes	7/2/91	[Signature]
W/Phon	205	ADP Final Quality Assurance Project Plan - these IERT for 105 Area at SACM, MA	8/1/91	[Signature]
W/Phon	206	ADP Final Quality Assurance Project Plan - these IERT for 105 Area at SACM, MA	8/1/91	[Signature]

IN

FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
AD	11	AD - Final Report on Remedial Investigation Report Vol. 1	9/30/76	[Signature]
AD	12	AD - Final Report on Remedial Investigation Report Vol. 1	9/30/76	[Signature]
Corresp	213	Media follow-up on Vol. 1	9/11/76	[Signature]
Corresp	214	News: EPA Gives Credit for Cleanup	9/11/76	[Signature]
Corresp	215	9th RAB Sign-In Sheet	9/16/76	[Signature]
Corresp	216	9th RAB Meeting Minutes	9/30/76	[Signature]
Corresp	217	Shirley M. Kase EPA Re-Draft Treatability Study Work Item Comment and Response Package and Draft Section Memorandum Comment and Response Package	10/1/76	[Signature]
Corresp	218	Shirley M. Kase EPA Re-Draft Treatability Study Work Item Comment and Response Package	10/1/76	[Signature]
Corresp	219	Media follow-up on Final RAB Mtg	10/1/76	[Signature]
Corresp	220	Shirley M. Kase EPA Re-Draft Treatability Study Work Item Comment and Response Package	10/1/76	[Signature]

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Corresp	221	Letter to Mr. Gabor, Eastern Research Group, Inc. - Phase II Project - Seawater Water		
Corresp	222	Letter to Dr. Glyn, Request RAB Rep from schools	10/29/96	C. Fitzgerald
Newspaper	223	TAB Article "Water Fouled"	11/14/96	C. Fitzgerald
E-Mail	224	Mr. Kaltopen - Comments Regarding SSCOM Risk	12/3/96	C. Fitzgerald
Newspaper	225	Suit Against Labs - Middlesex News	12/10/96	C. Fitzgerald
News	226	Add for RAB Member	12/25/96	C. Fitzgerald
Newspaper	227	Letters to the Editor - Some Clarification by the Labs	12/27/96	K. Kelly
Newspaper	228	"Natick Lab Eyed Over Hike in Cancer" Boston Globe	3/3/97	K. Kelly
Newspaper	229	"Cancer Clusters Seen in Natick" Middlesex News	3/3/97	K. Kelly
Newspaper	230	"Natick Cancer Cluster worries State officials" Middlesex	3/3/97	K. Kelly
Newspaper	231	"Cause of High cancer rate sought" Patriot Ledger	3/3/97	K. Kelly
Newspaper	232	"Cancer Scare" Middlesex News	3/3/97	K. Kelly
Newspaper	233	"Cancer Concern" Middlesex News	3/3/97	K. Kelly
Newspaper	234	"Natick's water safe now" Middlesex News	3/3/97	K. Kelly
Newspaper	235	"More money sought to study Natick Cancer rates"		
		Middlesex News	3/3/97	K. Kelly
Corresp	236	ltr from Martha Steele to Mr. Manning; Mr. Kaltopen	3/3/97	K. Kelly

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Corresp	237	Ltr to Mr. Campbell Amend #1 to final SSCOM Work Plan	3/3/97	Kellner
Corresp	238	Ltr to Mr. Ketch Amend #1 to final SSCOM Work Plan	3/3/97	Kellner
Corresp	239	Questions/Comments received from the Feb 25, 1997 RAB	3/4/97	Kellner
Newspaper	240	"Officials seek cause of elevated cancer incidence" Morning Sentinel	3/7/97	Kellner
Newspaper	241	"Costly Exposure" TAB	3/7/97	Kellner
Corresp	242	Ltr from Michael Berkman certifying Dr. Czeisler to be Lakewood Association Inc. representative to RAB	3/18/97	Kellner
Newspaper	243	"Water is OK" Milford Daily News	3/18/97	Kellner
Newspaper	244	"Natick's Water Safe Now" Middlesex News	3/21/97	Kellner
Newspaper	245	"State will address surge in local cancer" Middlesex news	3/21/97	Kellner
Newspaper	246	"Residents to Conduct Town's Own Cancer Survey" Natick Bulletin	3/24/97	Kellner
Newspaper	247	"Task force needed to study cancer data" Ltr. to Editor Natick Bulletin	3/24/97	Kellner
Newspaper	248	"Natick must get its own answers on cancer findings" Middlesex News	3/24/97	Kellner

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Newspaper	249	"Markey asks EPA to find cause of cancer" Middlesex News	3/24/97	K. Alue
Newspaper	250	"EPA cancer probe urged" Middlesex News	3/24/97	K. Alue
Corresp	251	Ltr to Mr. Keefe, EPA, Mr. Campbell MDEP, and Mr. Tata. Tata: Howard Inc. Re: Response to Comments Ground Water Model	3/25/97	K. Alue
Newspaper	252	"Unanswered questions" lead to formation of cancer task force." Middlesex News	3/25/97	K. Alue
Newspaper	253	"Dubious Desires" Middlesex News	3/25/97	K. Alue
Newspaper	254	"Test show high chemical levels" Middlesex News	3/31/97	K. Alue
Corresp	255	Ltr to Mr. Keefe, EPA and Mr. Campbell, DEP. Re: Draft Quality Assurance Quality Control Plan for Glyn Site	4/29/97	K. Alue
Newspaper	256	"Environment on hold" TAB	4/29/97	K. Alue
Corresp	257	Ltr. to RAB members FY 98 Budgeting Survey	5/1/97	K. Alue
Corresp	258	Ltr. to Mr. Conniff from PAO	5/1/97	K. Alue
Newspaper	259	"Army Lab focus of cancer dispute" Union News	5/5/97	K. Alue
Newspaper	260	"Town to form cancer task force" TAB	5/5/97	K. Alue
Newspaper	261	"Cancer task force to start own study" Natick Bulletin	5/5/97	K. Alue

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Newspaper	262	RAB mtg. advertisement "PAO Newsrelease	5/5/97	K. Blue
Newspaper	263	"Natick to Probe Cancers" Boston Globe	5/5/97	K. Blue
Newspaper	264	"Contingent goes to State House for Cancer Study Funds" TAB	5/5/97	K. Blue
Newspaper	265	"Dioxin Plant Studied as Natick Cancer Source" Middlesex news	5/5/97	K. Blue
Corresp	266	Ltr to Lucas (Dearian) (Middlesex news) From Susan Aninger PAO in response to article	5/5/97	K. Blue
Corresp	267	Ltr. to Mr. Keefe, EPA and Mr. Campbell DEP Re: Health and Safety Plan Addendum for SSOM proposed Gym Site	5/14/97	K. Blue
Newspaper	268	"Natick Cancer Study funds in state budget proposal" Middlesex news	5/22/97	K. Blue
Corresp	269	Ltr. to RAB members FY98 budgeting survey #2	5/29/97	K. Blue
Newspaper	270	"Water Study Breaks hit the new ground" Middlesex news	5/29/97	K. Blue
Newspaper	271	"Federal Study Shows Labs not likely cancer Source" Natick Bulletin	5/30/97	K. Blue
Newspaper	272	"Federal health report on Natick Labs is released" Natick Falls	5/30/97	K. Blue

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Corresp	273	Ltr to Jerome Keefe, EPA - Robert Campbell, DEP Re: Draft Work Plan for Proposed Gymnasium Site	5/30/97	R. Keefe
Corresp	274	Ltr to Martha Steele, DPH Re: Draft Proposed Sampling Plan	6/5/97	R. Keefe
Newspaper	275	"Cochituate Park Prepares for Summer Season" Natick Bulletin	6/9/97	R. Keefe
Newspaper	276	"Public health report on Natick Labs", "Water & Sewer rates to increase in coming year" Natick Bulletin	6/9/97	R. Keefe
Newspaper	277	"Natick water, sewer rates jump" Middlesex News	6/20/97	R. Keefe
Newspaper	278	"Water rates jump up to 32 percent in Natick" Middlesex News	6/20/97	R. Keefe
Newspaper	279	"Questions Remain on Natick Labs" TAB	6/23/97	R. Keefe
Newspaper	280	"Federal health assessment of Natick Labs Site released" TAB	6/23/97	R. Keefe
Newspaper	281	PAO news release for 24 June 1997 RAB meeting	6/24/97	R. Keefe
Corresp.	282	Ltr. to RAB members Re: Draft		

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Corresp	283	Work Plan for Proposed Glyn St. Ltr to Jerome Keefe, EPA & Robert Campbell, DEP Re: Draft Removal Work Plan and Draft Site Safety and Health Plan	6/24/97	K. Hues
Corresp	284	Ltr to Max Howie, ATSDR Re: Forwarding Comments on ATSDR Public Health Assessment	6/25/97	K. Hues
Corresp	285	Ltr to Jerome Keefe, EPA & Robert Campbell, DEP Re: Storm Water sampling of I-25; Main Outfall	6/27/97	K. Hues
Corresp	286	Ltr to Jerome Keefe, EPA & Robert Campbell, DEP Re: Final Removal Action/Work Plan for Storage Area (I-25 Area)	8/8/97	K. Hues
Newspaper	287		9/3/97	K. Hues
Newspaper	287	PAO News release for 23 September 1997 RAB meeting	9/24/97	K. Hues
Newspaper	288	"Labs to remove Contaminated Soil" Middlesex News	10/2/97	K. Hues
Corresp	289	Ltr. to Community re: Soil excavation at the Storage area	10/7/97	K. Hues

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Corresp	290	Ltr. to Jerome Keeffe, EPA; Robert Campbell, DEP; and Forest Lyford, USGS re: Final Treatability Study Work Plan	10/28/97	K. Hues
Corresp	291	Ltr. to Donald Stoddard, DEM re: Request for Authority to Complete Installation of Ground Water Monitoring Wells on property owned by DEM.	10/28/97	K. Hues
Corresp	292	Ltr. to Jerome Keeffe, EPA and Robert Campbell, DEP re: Draft Phase II 1-25 Remedial Investigation Report	10/28/97	K. Hues
Newspaper	293	"Tiny critters could clean Lake Cochituate" Middlesex News	10/28/97	K. Hues
Newspaper	294	"Cancer study outlook brightens" Middlesex News	10/28/97	K. Hues
Newspaper	295	"Cancer group looks at town history" Middlesex News	10/28/97	K. Hues
Newspaper	296	"Natick to debate school construction" Middlesex News	10/29/97	K. Hues
Newspaper	297	"Preliminary report from Cancer Study Task Force expected soon" Middlesex News	10/29/97	K. Hues
Newspaper	298	"Army lab cleanup on track" Natick Bulletin	10/29/97	K. Hues

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Newspaper	299	"Cancer map editorial position is harmful"		
		The Natick TAB	10/29/97	K. Alves
Newspaper	300	"Cancer levels now normal" Natick Bulletin	11/21/97	K. Alves
Newspaper	301	"Cancer study allays concerns" The Natick TAB	11/21/97	K. Alves
Corresp	302	Special Use Permit from DEM/Division of Forest and Parks for Pegan Cove	11/21/97	K. Alves
Newspaper	303	"Natick Labs testing clean-up system"		
		Middlesex News	12/5/97	K. Alves
Newspaper	304	"New Employer Representative Needed for RAB" SSCOM Bulletin	2/4/98	K. Alves
Corresp	305	Ltr to Jerome Keefe, EPA and Robert Campbell, DEP re: Installation Action Plan	2/4/98	K. Alves
Newspaper	306	"Lake overrun by pop pollution, development"		
		Middlesex news	2/4/98	K. Alves
Corresp	307	Ltr. to RAB members re: Draft Phase II Remedial Investigation Sections 5-9	3/3/98	K. Alves
Corresp	308	Ltr to Jessica Graham re: Draft Phase II Remedial Investigation Sections 5-9	3/3/98	K. Alves
Corresp	309	Ltr. to Dr. Campbell ATSDR re: maps for Public Health Assessment	3/3/98	K. Alves

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Newspaper	310	"Status report on Superfund Sites" Boston Globe	3/17/98	K. Alves
Corresp	311	Ltr. to Jerome Keefe, EPA and Robert Campbell, DEP re: Draft Final Quarterly Groundwater Sampling report	3/23/98	K. Alves
Newspaper	312	"Army Labs an unlikely suspect, study says" Natick Bulletin	4/6/98	K. Alves
Corresp	313	Ltr to Jerome Keefe, EPA and Robert Campbell, MA DEP re: Environmental Open House Posters	4/15/98	K. Alves
Corresp	314	Ltr to Community from BG Floyd re: invitation to Environmental Open House	4/15/98	K. Alves
Corresp	315	Ltr to Neighbors (mailing list) from BG Floyd re: Invitation to Environmental Open House	4/15/98	K. Alves
Corresp	316	Ltr to Laurie Haines, AEC, Steven Young, HydroGeologic, and Donald Koch, ETA re: Comments on Groundwater Modeling Draft Technical Work Plan Comments	4/15/98	K. Alves
Corresp	317	Ltr from Scott Pellerin re: NPDES permit exclusion for groundwater remediation	4/30/98	K. Alves

IN

FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Corresp	318	Ltr. to Scott Pellerin, EPA re: NPDES Permit Exclusion Reference #98-004	4/30/98	K Alves
Corresp	319	Ltr. w/enclosure from Jerome Keefe, EPA re: Phase II RI, T-25 Area Comments	4/30/98	K Alves
Corresp	320	Ltr. w/comments from Forest Lyford, USGS re: Comments on Phase II RI, T-25 Area	4/30/98	K Alves
Corresp	321	Ltr to Kathleen Thron, ADL re: Comments from EPA & USGS for Phase II RI, T-25 Area	4/30/98	K Alves
Corresp	322	Ltr to Jeffrey Pickett, ABB re: EPA & USGS Comments on the Phase II RI, T-25 Area	4/30/98	K Alves
Corresp	323	Ltr. to Laurie Haines, AEC, Steve Young, HGL, Donald Koch, EPA re: EPA & USGS Comments on the Phase II RI T-25 Area	4/30/98	K Alves
Corresp	324	Ltr. to Robert Campbell, DEP, Jerome Keefe, EPA and Forest Lyford, USGS re: Draft Technical Work Plan for Groundwater Modeling	5/8/98	K Alves

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Corresp	325	Ltr. to Bob Campbell, DEP and Jerome Keefe, EPA re: Installation Action Plan	5/8/98	K. Alves
Newspaper	326	"Army to pay for Labs cleanup" Middlesex News	5/12/98	K. Alves
Corresp	327	Ltr. to Robert Campbell, DEP and Jerome Keefe, EPA re: Draft Removal Action report for Storage Area, T-25 Area	5/12/98	K. Alves
Corresp	328	E-mail from Forest Lyford, USGS Subject: Review of Modeling Plan	5/26/98	K. Alves
Newspaper	329	"Labs give \$2.6 million to town for water treatment" Natick Bulletin	5/28/98	K. Alves
Newspaper	330	"Some clarification by the Labs" The Natick TAB	6/9/98	K. Alves
Newspaper	331	"Environmental Scene" Worcester Business Journal	6/17/98	K. Alves
Corresp	332	Ltr. to Laurie Haines, AEC, Steven Young, HGL, Donald Koch, ET al re: EPA, DEP, USGS Comments for Draft Technical Work Plan, Groundwater Modeling at SSCOM	6/17/98	K. Alves

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Corresp	333	Ltr. to Todd Frederick, DEM re: Quarterly Groundwater Sampling Report Event 15	6/26/98	K. Alue
Corresp	334	Ltr. to Jerome Keek, EPA and Robert Campbell, DEP re: Draft Work Plan for Site Investigation, Boiler Plant	6/29/98	K. Alue
Corresp	335	Ltr. to Kate Lewis, DEM re: Quarterly Groundwater Sampling Report Event 15	7/14/98	K. Alue
Corresp	336	Ltr. to Terrance Whalen, Natick Conservation Commission re: Quarterly Groundwater Sampling Report Event 15	7/14/98	K. Alue
Corresp	337	Ltr. to Kerry Van Acker, Cochituate State Park re: Quarterly Groundwater Sampling Report Event 15	7/14/98	K. Alue
Corresp	338	Ltr. to Michael Plumb, ANEPTEK re: Draft Removal Action Report, Draft Final Quarterly Groundwater Sampling Report Events 14 & 15, Draft Work Plan for Site Investigation Boiler Plant Area	8/11/98	K. Alue
Corresp	339	Ltr. to Scott Tellerin, EPA re: NPDES Permit Exclusion Reference # 98-009	8/11/98	K. Alue

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Corresp	340	Ltr. to Robert Campbell, DEP and Jerome Keefe, EPA re: Draft Comments and Response Package on Phase II T-25 Area Remedial Investigation	8/11/98	K. Allen
Corresp	341	Ltr. to Robert Campbell, DEP and Jerome Keefe, EPA re: T-25 Area Schedule	8/11/98	K. Allen
Corresp	342	Ltr. to Robert Campbell, DEP, Jerome Keefe, EPA and Forrest Lyford, USGS re: Response to Comments, Draft Technical Work Plan, Groundwater Modeling	8/11/98	K. Allen
Corresp	343	Memorandum for Peter Tuttle re: T-25 Area Current Revised Schedule	8/11/98	K. Allen
Response Card	344	From May 1998 Newsletter	1/28/99	R. Boutin
Response Card	345	From October 1997 Newsletter	1/28/99	R. Boutin
WK PLAN	346	Tier II Ecological Risk Assessment Work Plan	2/1/99	R. Boutin
WK PLAN	347	Site Investigation Work Plan Report for Boiler Plant Area, Former Haz. Mat. Storage Buildings, Former Piggery & Building T-23	2/1/99	R. Boutin
Newspaper	348	TAB Article: Residents sought to monitor cleanup	2/2/99	R. Boutin

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
R.I. Report	349	Final Phase II Remedial Investigation Report Vol. I, Sect. 1-4, T-25 Area at U.S. Army SSCOM	2/2/99	R. Boutin
R.I. Report	350	Final Phase II R.I. Report, Vol. II, Sect. 5-9 with Comment. & Response Packages	2/2/99	R. Boutin
Correspondence	351	Cover Letter - Final Phase II R.I. Report	2/11/99	R. Boutin
Correspondence	352	Caitlin Fitzgerald - Earth Science Student - Replied to	2/11/99	R. Boutin
Correspondence	353	Maria Wolman - Earth Science Student - Replied to	2/11/99	R. Boutin
Corresp.	354	Groundwater Use & Value Determination	2/23/99	R. Boutin
Newspaper	355	Contamination threatens towns backup well TAB ^{3/2}	3/4/99	R. Boutin
Newspaper	356	Long Road to Remediation - Natick Tab 3/2/99	3/4/99	R. Boutin
Correspondence	357	Request for visit to SSC - Caitlin Fitzgerald	3/29/99	R. Boutin
Correspondence	358	Request & Response to Info about Pegan Cove	3/29/99	R. Boutin
Newspaper	359	Public Notices for RAB Meeting 3/4/99 - BAH	4/22/99	R. Boutin
Correspondence	360	Ltr. to New RAB Members - Intro Packet	5/6/99	R. Boutin
Response Card	361	From Winter 1999 Newsletter	5/17/99	R. Boutin
Corresp.	362	Applications for RAB membership	5/20/99	R. Boutin
Corresp.	363	Comments on FFS/Treatability Study for T-25 Area	5/21/99	R. Boutin
Corresp.	364	- Environmental Insight		
Corresp.	364	Comments on FFS/Treatability Study - C. Czeisler	5/28/99	R. Boutin
Corresp.	365	Response to C. Czeisler/Lakewood Assn.	6/2/99	R. Boutin

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Newspaper	366	Boston Sunday Globe, Army, Natick talk on tainted wells	6/13/99	R. Boutin
Corresp	367	Dept. Public Health - Health Consultation on T-25 Outfall Area	6/30/99	R. Boutin
Contacts	368	Original members of the Restoration Advisory Bd	7/8/99	R. Boutin
Corresp.	369	Ltr. to Chief Fredette requesting meeting room	8/12/99	R. Boutin
Corresp.	370	Ltr. from Tara Howard on T-25 FFS/TS	8/12/99	R. Boutin
Corresp.	371	Ltr. to Bob Campbell, Jerry Keefe, Kathy Thrun @ Draft FFS for T-25	8/12/99	R. Boutin
Corresp.	372	Comments on Draft Proposed Plan of T-25 Area from Environmental Insight	8/13/99	R. Boutin
Newspaper	373	T-25 Proposed Plan Public Hearing Ad - Metrowest Daily	8/26/99	R. Boutin
Corresp	374	Attendance List for Informational Meeting on T-25 Proposed Plan on 9/9	9/13/99	R. Boutin
Newspaper	375	Natick Bulletin \$3.1M to keep drinking H ₂ O Safe	9/22/99	R. Boutin
Newspaper	376	Boston Globe, Army set to pay \$3.1M for cleanup	9/28/99	R. Boutin
Newspaper	377	Metrowest Daily, Army PLANS BIG CLEANUP 9/23/99	9/29/99	R. Boutin
Correspondent	378	T-25 GW Proposed Plan Comment, Larry Meik, Citizen of Natick	10/11/99	R. Boutin
Corresp.	379	T-25 GW Proposed Plan Comment, Marco Kaltofen	10/11/99	R. Boutin
Corresp.	380	T-25 GW P.P. Comment, Environmental Insight	10/11/99	R. Boutin
Corresp.	381	P.A.D. Press Release - 10-5-99 RAB Meeting	10/15/99	R. Boutin

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FILE	FILE #	DESCRIPTION	DATE	SIGNATURE
Report	382	FFS/TS T-25 Area at SSC - FINAL	9/99	R. Boutin
Newspaper	383	Globe Article - Army-Natick agreement to depend on EPA	10/8/99	R. Peret
Corresp	384	T-25 Groundwater Responsiveness Summary	11/15/99	R. Peret
Newspaper	385	Herald Article - Govt. agencies on list of worst polluters in State	12/1/99	R. Peret
Newspaper	386	Metrowest Daily News - Natick Labs makes 'Dirty Dozen' List	12/4/99	R. Peret
Report	387	Public Hearing Transcript: T-25 Proposed Plan	12/7/99	R. Peret
Newspaper	388	Metrowest Daily News - Natick Settlement may not be for the best	12/9/99	R. Peret
Correspondance	389	Environmental Insight: Responses to Proposed Plan Comments	12/13/99	R. Peret
Correspondance	390	Adam Last's Letter of Resignation from RAB	1/12/00	R. Peret
Correspondance	391	Response Cards from Newsletter # 8	5/10/00	R. Peret
News paper	392	FRAMINGHAM TAB - Natick Legal Woes	9/18/00	J. McHugh
news paper	393	Metrowest Daily News - Labs Cleanup Plan needs work	11/03/00	J. McHugh
newspaper	394	Boston Globe - "Swallowing a bitter pill"	11/06/00	J. McHugh
News paper	395	Boston Globe - "A two year wait"	02/05/01	J. McHugh
NEWSPAPER	396	Boston GLOBE - "METAL PULLED FROM LAKE"	4/19/01	Harold Z. Grebaner
NEWSPAPER	397	METROWEST Daily News - "NATICK LABS CLEANUP CLOSED?"	4/22/2004	JAMES B. CONNOLLY
REPORT	398	FINAL TIER III DETERMINISTIC ECOLOGICAL RISK ASSESSMENT	7/21/04	JAMES B. CONNOLLY

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Documents currently in the public repositories (U.S. Army Soldier Systems Center's Environmental, Safety and Health Office, Morse Institute Reference Section, Natick Board of Health, Massachusetts Department of Environmental Protection (Boston), U.S. Environmental Protection Agency (EPA) (Boston))

Document	Title	Date
0		
1	Analysis of Existing Facilities/Environmental Assessment Report, U.S. Army Natick Research and Development Command, Natick, Massachusetts	November 1978
2	Installation Assessment of U.S. Army Natick Research and Development Command, Report # 170	May 1980
3	Phase II Petrix Gas Survey conducted at U.S. Army Natick Research, Development and Engineering Center (NRDEC)	April 1990
4	Final Report Master Environmental Plan for the U.S. Army Natick Research, Development and Engineering Center (NRDEC)	January 1993
5	Interim Remedial Action Study, Remedial Investigation/Feasibility Study (RI/FS) for T-25 Area at the U.S. Army Natick Research, Development, and Engineering Center (NRDEC), Natick, Massachusetts	March 1993
6	EPA Final Hazard Ranking System (HRS), U.S. Army Natick Research, Development and Engineering Center (NRDEC)	May 1993
7	Draft Report, Assessment of Location-Specific Applicable or Relevant and Appropriate Requirements (ARARS) for the U.S. Army Natick Research, Development and Engineering Center (NRDEC), Natick, Massachusetts	June 1993
8	Draft Feasibility Study Report, T-25 Area at the U.S. Army Natick Research, Development and Engineering Center (NRDEC), Natick, Massachusetts	July 1994
9	Agency for Toxic Substances and Disease Registry, Department of Health and Human Services, Public Health Service Site Visit Summary for the U.S. Army Natick Research, Development and Engineering Center (NRDEC), Natick, Massachusetts	September 1994
10	Draft Remedial Investigation (RI) Addendum T-25 Area and Water Supply Wells at the U.S. Army Natick Research, Development and Engineering Center (NRDEC)	September 1994

Document	Title	Date
11	Draft Geophysical Investigation, Natick Research and Development Engineering Center (NRDEC), Natick, Massachusetts	January 1995
12	Prepare Ground Water Model for Natick Research and Development and Engineering Center (NRDEC), Draft Technical Plan	March 1995
13	Draft Work Plan Remedial Investigation/Feasibility Study (RI/FS) and Interim Remedial Alternatives (IRA) Study and Design for the T-25 Area at the U.S. Army Natick Research, Development and Engineering Center (NRDEC)	March 1995
14	Draft Stepped Rate Aquifer Test Design, T-25 Area at the U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	March 1996
15	Final Health and Safety Plan, Remedial Investigation/Feasibility Study (RI/FS) for T-25 Area at U.S. Army Natick Research, Development and Engineering Center (NRDEC), Natick, Massachusetts	June 1996
16	Final Work Plan - Phase II Remedial Investigation (RI) for T-25 Area at the U.S. Army Soldier Systems Command (SSCOM) Natick, Massachusetts	June 1996
17	Final Quality Assurance Project Plan - Phase II Remedial Investigation (RI) for T-25 Area at the U.S. Army Soldier Systems Command (SSCOM) Natick, Massachusetts - Volume I of II	June 1996
18	Final Quality Assurance Project Plan - Phase II Remedial Investigation (RI) for T-25 Area at the U.S. Army Soldier Systems Command (SSCOM) Natick, Massachusetts - Volume II of II	June 1996
19	Final Quality Assurance Project Plan Remedial Investigation/Feasibility Study (RI/FS) and Interim Remedial Alternatives (IRA) Study and Design for T-25 Area at the U.S. Army Natick Research, Development and Engineering Center (NRDEC), Natick, MA	July 1996
20	Draft Final Community Relations Plan - U.S. Army Soldier Systems Command (SSCOM) Natick, Massachusetts	July 1996
21	Draft Final Letter Report Survey of Local Properties - Remedial Investigation/Feasibility Study (RI/FS) for T-25 Area at the U.S. Army Natick Research, Development and Engineering Center (NRDEC), Natick, Massachusetts	July 1996

Document	Title	Date
22	Phase I Final Work Plan - Remedial Investigation/Feasibility Study (RI/FS) and Interim Remedial Alternatives (IRA) Study and Design for T-25 Area at the U.S. Army Natick Research, Development and Engineering Center (NRDEC), Natick Massachusetts	August 1996
23	Final Phase I Remedial Investigation (RI) Report Volume I of III Sections 1.0 through 8.0 - T-25 Area at the U.S. Army Natick Research, Development and Engineering Center (NRDEC), Natick, Massachusetts	August 1996
24	Final Phase I Remedial Investigation (RI) Report Volume II of III Appendices - T-25 Area at the U.S. Army Natick Research, Development and Engineering Center (NRDEC), Natick, Massachusetts	August 1996
25	Final Phase I Remedial Investigation (RI) Report Volume III of III Appendices - T-25 Area at the U.S. Army Natick Research, Development and Engineering Center (NRDEC), Natick, Massachusetts	August 1996
26	Draft Final Quarterly Ground Water Monitoring Report (Summer and Fall 1995) - T-25 Area, Water Supply Well Area, and Former Proposed Gymnasium Area at the U.S. Army Soldier Systems Command (SSCOM) Natick, Massachusetts	August 1996
27	DRAFT Action Memorandum Storage Area, U.S. Army Soldier Systems Command (SSCOM) Natick, Massachusetts, Revision 1	November 1996
28	Draft Quarterly Ground Water Monitoring Report (Winter 1996 and Spring 1996) - T-25 Area, Water Supply Well Area, and Former Proposed Gymnasium Area, and Boiler Plant Area at the U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	December 1996
29	Phase II Field Investigation Data, Remedial Investigation (RI) of the T-25 Area at the U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	January 1997
30	Draft Quality Assurance Project Plan-Addendum, Sections 1.0 - 15.0, U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	May 1997
31	Draft Health and Safety Plan-Addendum Former Proposed Gymnasium Site, SSCOM Water Supply Wells Remedial Investigation (RI) Data Item A003	May 1997
32	Draft Final Work Plan, Former Proposed Gymnasium Site, SSCOM Water Supply Wells Remedial Investigation (RI) Data Item A003	June 1997

Document	Title	Date
33	Final Report Ground Water Model for Soldier Systems Command (SSCOM), Natick, Massachusetts	June 1997
34	Draft Quarterly Ground Water Monitoring Report (Summer 1996, Fall 1996 and Winter 1996\1997) - T-25 Area, Water Supply Well Area, and Former Proposed Gymnasium Area, and Boiler Plant Area at the U.S. Army Soldier Systems Command (SSCOM), Natick, MA	June 1997
35	Agency for Toxic Substance and Disease Registry Public Health Assessment for Natick Laboratory Army Research a/k/a U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	July 1997
36	Final Site Safety and Health Plan for Storage Area Removal Action T-25 Area, U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	August 1997
37	Final Removal Action Work Plan for Storage Area Removal Action T-25 Area, U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	August 1997
38	Final Treatability Study Work Plan - T-25 Area at the U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	October 1997
39	Final Work Plan Former Proposed Gymnasium Site, Soldier Systems Command (SSCOM) Water Supply Wells Remedial Investigation (RI) Data Item A003	December 1997
40	Draft Final Quarterly Groundwater Sampling Report Event 14 (July 1997) at the U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	March 1998
41	Public Health Assessment for the U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	March 1998
42	Health Consultation for the U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	March 1998
43	Draft Technical Work Plan, Groundwater Modeling at the U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	April 1998
44	Draft Final Quarterly Groundwater Sampling Report Event 15 (January 1997) at the U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	June 1998
45	Draft Work Plan for Site Investigation for Boiler Plant, Former Hazardous Materials Storage Building, Former Piggery, and Building T-23, U.S. Army Environmental Center, Aberdeen Proving Grounds, Maryland	June 1998

Document	Title	Date
46	Storm Water Sampling Report, Contract No. DAAK60-97-P-4847, prepared for Soldier Systems Command (SSCOM)	August 1998
47	Draft Final Work Plan for Site Investigation for Boiler Plant, Former Hazardous Materials Storage Building, Former Piggery, and Building T-23, U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	September 1998
48	Draft Final Quarterly Groundwater Sampling Report Event 16 (April 1998) at the U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	October 1998
49	Tier II Ecological Risk Assessment Work Plan, T-25 Area at the U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	November 1998
50	Draft Addendum to Quality Assurance Project Plan, Tier II Ecological Risk Assessment and Treatability Study Operation and Maintenance for T-25 Area at the U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	November 1998
51	Final Phase II Remedial Investigation (RI) Report Volume I sections 1.0 through 4.0 - T-25 Area at the U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	December 1998
52	Final Phase II Remedial Investigation (RI) Report Volume II sections 5.0 through 9.0 - T-25 Area at the U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	December 1998
53	Draft Remedial Investigation Report (RI), Former Proposed Gymnasium Site, Data Item A013, Volume I of II-Text, Figures And Tables	January 1999
54	Draft Remedial Investigation Report (RI), Former Proposed Gymnasium Site, Data Item A013, Volume II of II-Appendices A through V	January 1999
55	Final Removal Action Report, Storage Area Removal Action T-25 Area at the U.S. Army Soldier Systems Command (SSCOM), Natick, Massachusetts	February 1999
56	Draft Final Quarterly Groundwater Sampling Report Event 17 (August 1998) U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	February 1999
57	Draft Remedial Investigation (RI) Report Soldier Systems Center (SSC) Water Supply Wells Site, Volume I of II: Text, Tables & Figures	March 1999

Document	Title	Date
58	Draft Remedial Investigation (RI) Report Soldier Systems Center (SSC) Water Supply Wells Site, Volume II of II: Appendices A through R	March 1999
59	Draft Final Quarterly Groundwater Sampling Report Event 18 (December 1998) U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	May 1999
60	Draft Final Quarterly Groundwater Sampling Report Event 19 (March 1999) U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	June 1999
61	Final Focused Feasibility Study/Treatability Study, T-25 Area at the U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	September 1999
62	Transcript of Public Hearing, Re: U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts Proposed Plan to Clean Up Groundwater at the T-25 Area	September 1999
63	Tier II Ecological Risk Assessment Work Plan, Main Storm water Outfall (MSO) Area, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	October 1999
64	Draft Final Quarterly Groundwater Sampling Report Event 20 (July 1999) U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	February 2000
65	1999 Storm Water Sampling Report; U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	January 2002
66	Working Draft, Interim Technical Memorandum, T-25 Area Storm water Outfall, Tier II Ecological Risk Assessment, U.S. Army Soldier Systems Center (SSC)	April 2000
67	Draft Preliminary Phase II Site Investigation Report, Boiler Plant Site, Soldier Systems Center (SSC), Natick, Massachusetts, Data Item A003	May 2000
68	Draft, Quarterly Groundwater Monitoring Report Event 21 (October 1999), Soldier Systems Center (SSC), Natick, Massachusetts	June 2000
69	Draft, T-25 Area Tier II Ecological Risk Assessment Report for the U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	June 2000
70	Draft Technical Memorandum, Building 22, Soldier Systems Center (SSC), Natick, Massachusetts	September 2000

Document	Title	Date
71	Draft Work Plan, Building 22 Remedial Investigation (RI), Soldier Systems Center (SSC), Natick, Massachusetts	September 2000
72	Water Resources Investigation Report, Pond-Aquifer Interaction at South Pond of Lake Cochituate, Natick, Massachusetts, prepared in cooperation with the U.S. Environmental Protection Agency (USEPA) and the U.S. Army	January 2001
73	Draft Final, Revised Quality Assurance Project Plan, Soldier Systems Center (SSC), Natick, Massachusetts, Volume I Sections 1.0-14.0 and Appendices A through G	January 2001
74	Draft, Final Revised Quality Assurance Project Plan, Soldier Systems Center (SSC), Natick, Massachusetts, Volume II Appendix H Laboratory Quality Assurance Plan and Operating Procedures (Severn Trent Laboratory, Sparks, Maryland)	January 2001
75	Draft, Final Revised Quality Assurance Project Plan, Soldier Systems Center (SSC), Natick, Massachusetts, Volume III Appendix I Laboratory Quality Assurance Plan and Standard Operating Procedures (Datachem Laboratory, Salt Lake City, Utah)	January 2001
76	Draft Final, Quarterly Groundwater Monitoring Report Event 26 (June 2001), Soldier Systems Center (SSC), Natick, Massachusetts	February 2001
77	Draft Final Quarterly Groundwater Monitoring Report, Event 22 (January 2000) U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	March 2001
78	Draft Final Quarterly Groundwater Monitoring Report, Event 23 (May 2000), Soldier Systems Center (SSC), Natick, Massachusetts	March 2001
79	Record of Decision, T-25 Area Ground Water (Operable Unit 1), U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	April 2001
80	Draft Report Groundwater Flow and Transport Modeling Results for the T-25 Area at Soldier Systems Center (SSC), Natick, Massachusetts	June 2001
81	Draft Tier III Ecological Risk Assessment Work Plan, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	August 2001
82	Draft Quality Assurance Project Plan Addendum, Tier III Ecological Risk Assessment, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	August 2001
83	Draft Letter Report Historic Outfalls, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	August 2001

Document	Title	Date
84	Draft Main Storm Water Outfall (MSO) Tier II Ecological Risk Assessment Report for the U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	August 2001
85	Draft Feasibility Study (FS) Report, Former Proposed Gymnasium Site	August 2001
86	Draft Final Remedial Investigation (RI) Report, Soldier Systems Center (SSC) Water Supply Wells Site, Volume I of II - Text, Figures and Tables	August 2001
87	Draft Final Remedial Investigation (RI) Report, Soldier Systems Center (SSC) Water Supply Wells Site, Volume II of II - Appendices A through R	August 2001
88	Final Work Plan, Buildings 22 and 36 Remedial Investigation (RI), Soldier Systems Center (SSC), Natick, Massachusetts	August 2001
89	Final Revised Quality Assurance Project Plan, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts, Volume I, Sections 1.0-14.0 and Appendices A through G	August 2001
90	Draft Quarterly Groundwater Monitoring Report, Event 24 (October 2000), Soldier Systems Center (SSC)	August 2001
91	Draft Final Quarterly Groundwater Monitoring Report, Event 24 (October 2000), Soldier Systems Center (SSC)	September 2001
92	NPDES Permit Exclusion - Chemical Data, July 1, 2001 to September 30, 2001, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	October 2001
93	Draft Storm Water Sampling Report, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	October 2001
94	Final, T-25 Area Tier II Ecological Risk Assessment Report, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	December 2001
95	Final Report, Development and Application of a Calibrated Ground Water Flow and Transport Model for the T-25 Area at Soldier Systems Center (SSC), Natick, Massachusetts	February 2002
96	Draft Final, Quarterly Groundwater Monitoring Report, Event 25 (March 2001), Soldier Systems Center (SSC), Natick, Massachusetts	February 2002
97	Draft Revised Risk Assessment Approach Technical Memorandum, Soldier Systems Center (SSC), Natick, Massachusetts	June 2002

Document	Title	Date
98	Draft Final Quarterly Groundwater Monitoring Report, Event 27 (August 2001), Soldier Systems Center (SSC), Natick, Massachusetts	June 2002
99	Letter Report titled Natick Tier III Fish Data - Human Health Screening Comparisons prepared by ICF Consulting, Inc., 18 July 2002	July 2002
100	Interim Technical Memorandum, Tier III Ecological Risk Assessment, U.S. Army Soldier Systems Center (SSC)	July 2002
101	Final Draft, Storm water Sampling Report 2001 Sampling Event, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts August 2002	August 2002
102	Final Tier III Ecological Risk Assessment Work Plan, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts August 2002	August 2002
103	Final Quality Assurance Project Plan Addendum, Tier III Ecological Risk Assessment, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts August 2002	August 2002
104	Final Letter Report, Historic Outfalls, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts August 2002	August 2002
105	Final Main Stormwater Outfall (MSO), Tier II Ecological Risk Assessment Report for the U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts August 2002	August 2002
106	Draft, Quality Assurance Project Plan Addendum - Building 14 and Former Building 13 Site Investigation/Remedial Investigation and Feasibility Study, U.S. Army Soldier Systems Command (SSC), Natick, Massachusetts September 2002	September 2002
107	Draft Work Plan, Building 14 and Former Building 13 Site Investigation/Remedial Investigation and Feasibility Study	September 2002
108	Draft Remedial Investigation Report, Buildings 22 and 36, Soldier Systems Center (SSC), Natick, Massachusetts, Volume I of II, Text, Figures, and Tables November 2002	November 2002
109	Draft Remedial Investigation Report, Buildings 22 and 36, Soldier Systems Center (SSC), Natick, Massachusetts, Volume II of II, Appendices A through R November 2002	November 2002
110	Final, Stormwater Sampling Report - 2001 Sampling Event, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	November 2002

Document	Title	Date
111	Draft Final, Quarterly Groundwater Monitoring Report, Event 29 (March 2002), Soldier Systems Center (SSC), Natick, Massachusetts December 2002	December 2002
112	Augmentation of the Ground-Water Monitoring Well Network in the Vicinity of the T-25 Area, U.S. Army Soldier Systems Center (SSC), Natick, Massachusetts	January 2003
113	Draft Final Quarterly Groundwater Sampling Report Event 28 (December 2001) U.S. Army Soldier Systems Center Natick, Massachusetts	August 2002
114	Quality Assurance Project Plan Addendum Building 14 and Former Building 13 Site Investigation/Remedial Investigation and Feasibility Study, U.S. Army Soldier Systems Command (SSC) Natick, Massachusetts	March 2003
115	Work Plan Building 14 and Former Building 13 Site Investigation/Remedial Investigation and Feasibility Study	March 2003
116	Draft Work Plan Buildings 2 and 45 Site Investigation Soldier Systems Center, Natick, Massachusetts	April 2003
117	NPDES Permit Exclusion - Chemical Data January 1, 2003 to March 31, 2003	April 2003
118	Draft Final Quarterly Groundwater Sampling Report Event 30 (June 2002) U.S. Army Soldier Systems Center Natick, Massachusetts	May 2003
119	Draft Final Remedial Investigation Report Buildings 22 and 36, U.S. Army Soldier Systems Center Natick, Massachusetts Volume 1 of 2	June 2003
120	Draft Final Remedial Investigation Report Buildings 22 and 36, U.S. Army Soldier Systems Center Natick, Massachusetts Volume 2 of 2	June 2003
121	NPDES Permit Exclusion - Chemical Data April 1, 2003 to June 30, 2003	July 2003
122	Tier III Deterministic Ecological Risk Assessment Report	March 2004
123	Draft Final Quarterly Groundwater Sampling Report Event 31 (September 2002) U.S. Army Soldier Systems Center Natick, Massachusetts	August 2003
124	Draft Final Quarterly Groundwater Sampling Report Event 32 (December 2002) U.S. Army Soldier Systems Center Natick, Massachusetts	August 2003

Document	Title	Date
125	Method 2 Risk Characterization and Class A-2 Response Action Outcome Statement	September 2003
126	Final Phase II Site Investigation Report, Volume I - Boiler Plant Site	September 2003
127	Final Phase II Site Investigation Report, Volume II Appendices - Boiler Plant Site	September 2003
128	Final Work Plan Building 2 & 45 Site Investigation U.S. Army Soldier Systems Center Natick, Massachusetts	January 2004
129	Draft Final Quarterly Groundwater Sampling Report Event 33 (April 2003)	January 2004
130	Draft Final Site Investigation Work Plan, Buildings 62 & 68	January 2004
131	Draft Final Quarterly Groundwater Sampling Report Event 34 (June 2003)	February 2004
132	NPDES Permit Exclusion Chemical Data October 1 2003-December 31 2003	February 2004
133	New Long-Term Monitoring Well Letter Report T-25 Area U.S. Army Soldier Systems Center Natick, Massachusetts	February 2004
134	Long-Term Monitoring Plan T-25 Area (OU-1) Ground Water Treatment System U.S. Army Soldier Systems Center Natick, Massachusetts	March 2004
135	Draft Site Investigation Report, Building 14 and Former Building 13, U.S. Army Soldier Systems Center (SSC) Natick, Massachusetts	March 2004
136	New Extraction Well Letter Report T-25 Area U.S. Army Soldier Systems Center Natick, Massachusetts	April 2004
137	T-25 Area (OU-1) Ground Water Treatment System Operation and Maintenance Manual Volume 1 of 2	May 2004
138	T-25 Area (OU-1) Ground Water Treatment System Operation and Maintenance Manual Volume 2 of 2	May 2004
139	Draft Buildings 22 & 36 Feasibility Study Work Plan	April 2004
140	Draft Final Quarterly Groundwater Sampling Report Event 35 (September 2003)	July 2004
141	Draft Final Quarterly Groundwater Sampling Report Event 36 (December 2003)	August 2004

Document	Title	Date
142	Final Letter Work Plan, Additional HHRA and ERA Activities to Support Sediment Risk Management at the U. S. Army Soldier Systems Center (SSC) Natick, MA	August 2004
143	Final Work Plan Addendum - Building 14 and Former Building 13 Site Investigation	September 2004
144	Building 14 and Former Building 13 Site Investigation Report	September 2004
145	Draft T-25 Area Groundwater Treatment System January - June 2004 Semi Annual Report	October 2004
146	Draft Buildings 22 & 36 Feasibility Study Report	October 2004
147	Draft Quarterly Assurance Project Plan Addendum	November 2004
148	Draft Final Quarterly Groundwater Sampling Report Event 37 (March 2004)	November 2004
149	Safety and Health Plan	November 2004
150	Draft Final Sediment Risk Management Technical Memorandum: Additional Assessment Activities to Support Sediment Risk Management at the U. S. Army Soldier Systems Center (SSC) Natick, MA	December 2004
151	Draft Study Area 2 Record Review Memorandum	February 2005
152	Final Quality Assurance Project Plan Addendum, Quarterly Groundwater Monitoring Program - U.S. Army Soldier Systems Center (SSC) Natick, MA	February 2005
153	Draft Buildings 62 and 68 Removal Action Work Plan	February 2005
154	Application of an Updated Regional Groundwater Flow Model and an Updated T-25 Area Transport Model	February 2005
155	Numerical Simulations of Remedial Alternatives for the PCE Plume Near Buildings 36 and 22	February 2005
156	Draft Final Quarterly Groundwater Sampling Report Event 38 (June 2004)	February 2005
157	Final Record Review Memorandum SA2 Waste Oil Underground Storage Tank, SSC Natick, MA	February 2005
158	U.S. Army Natick Laboratories The Science Behind the Soldier	April 2005

Document	Title	Date
159	Final Removal Action Closure Report Soil Excavation and Off-Site Treatment/Disposal at the Former Proposed Gymnasium Site Soldier Systems Center Natick, MA	May 2003
160	T-25 Area Ground Water Treatment System Semi-Annual Report January through June 2004 U.S. Army Soldier Systems Center (SSC) Natick, MA	April 2005
161	T-25 Area Ground Water Treatment System 2003 Annual Report U.S. Army Soldier Systems Center (SSC) Natick, MA	April 2005
162	Draft Final Quarterly Groundwater Monitoring Report Event 39 (September 2004) Soldier Systems Center Natick, MA	May 2005
163	Draft Final Quarterly Groundwater Monitoring Report Event 40 (December 2004) U.S. Army Soldier Systems Center (SSC) Natick, MA	May 2005
164	Final Action Memorandum Building 62 and 68 Soldier Systems Center Natick, MA	May 2005
165	Draft Site Investigation Report Building 63, 2, and 45 U.S. Army Soldier Systems Center Natick, MA (2 Volumes)	June 2005
166	Final Site Investigation Report Addendum Building 14 and Former Building 13 U.S. Army Soldier Systems Center (SSC) Natick, MA	July 2005
167	Final Remedial Investigation Report Buildings 22 and 36 Soldier Systems Center Natick, MA (3 Volumes)	September 2005
168	Draft Final Quarterly Groundwater Monitoring Report Event 41 (April 2005) U.S. Army Soldier Systems Center (SSC) Natick, MA	September 2005
169	Final Action Memorandum Building 14 and Former Building 13 U.S. Army Soldier Systems Center (SSC) Natick, MA	September 2005
170	Draft Final Quarterly Groundwater Monitoring Report Event 42 (August 2005) U.S. Army Soldier Systems Center (SSC) Natick. MA	December 2005
171	Final Removal Action Completion Report Buildings 62 and 68 Soldier Systems Center Natick, MA	February 2006
172	T-25 Area Ground Water Treatment System 2004 Annual Report U.S. Army Soldier Systems Center (SSC) Natick, MA	March 2006
173	Final T-25 Area Ground Water Treatment System Semi-Annual Report January through June 2005 U.S. Army Soldier Systems Center (SSC) Natick, MA	March 2006

Document	Title	Date
174	Final Work Plan for First Five-Year Review U.S. Army Soldier Systems Center (SSC) Natick, MA	March 2006
175	Final Work Plan Ground Water Remedial Optimization Study at the T-25 Area U.S. Army Soldier Systems Center (SSC) Natick, MA	April 2006
176	Final Remedial Investigation Report Former Proposed Gymnasium Site Data Item A013 Volume I of II Text, Figures, and Tables	December 2006
177	Final Remedial Investigation Report Former Proposed Gymnasium Site Data Item A013 Volume II of II Appendices A through U	December 2006
178	Draft Final Remedial Investigation Report Former Proposed Gymnasium Site Data Item A013 Volume I of II Text, Figures, and Tables	August 2006
179	Draft Final Remedial Investigation Report Former Proposed Gymnasium Site Data Item A013 Volume II of II Appendices A through U	August 2006
180	Final Buildings 22 and 36 Feasibility Study Report	March 2008
181	Final Site Investigation Report Building 63, 2, and 45 US Army Soldier Systems Center Natick, MA Volume I of II Text, Figures, and Tables	June 2008
182	Final Site Investigation Report Building 63, 2, and 45 US Army Soldier Systems Center Natick, MA Volume II of II Appendices A-M	June 2008
183	Final Supplemental Remedial Investigation Report Former Proposed Gymnasium Site	December 2006
184	Final Pilot Study Work Plan Groundwater Containment at Building 22 and 36 and Buildings 63, 2, and 45	January 2007
185	Draft Final Supplemental Remedial Investigation Report Former Proposed Gymnasium Site	September 2006
186	Draft Pilot Study Work Plan Groundwater Containment at Buildings 22 and 36 and Buildings 63,2, and 45	April 2006
187	Draft Final Explanation of Significant Differences for the T-25 Area Groundwater (Operable Unit 1)	August 2006
188	Draft Sediment Feasibility Study Work Plan	October 2006
189	Draft Final Pilot Work Plan Groundwater Containment at Buildings 22 and 36 and Buildings 63,2, and 45	August 2006

Document	Title	Date
190	Draft Final Sediment Feasibility Study Work Plan	November 2006
191	Final Removal Action Work Plan Building 14 and Former Building 13	July 2006
192	Final Sediment Feasibility Study Work Plan	January 2007
193	Draft Sediment Feasibility Study	January 2007
194	Draft Focused Feasibility Study Former Proposed Gymnasium Site	January 2007
195	Technical Specifications for Groundwater Containment Pilot Study Soldier Systems Center Natick, MA	October 2006
196	First Five-Year Review Report for U.S. Army Soldier Systems Center Natick, MA	January 2007
197	Draft Final Quarterly Groundwater Monitoring Report Event 43 (October 2005)	April 2006
198	Draft Final Quarterly Groundwater Monitoring Report Event 44	August 2006
199	Draft Final Quarterly Groundwater Monitoring Report Event 46 (September 2006)	April 2007
200	Draft Final Quarterly Groundwater Sampling Report Event 45 (June 2006)	March 2007
201	Draft Record of Decision for Former Proposed Gymnasium Site and Buildings T-62 and T-68	June 2007
202	Groundwater Remedial Optimization Study at the T-25 Area Summary of Event 02 Post HRC-A Injection Groundwater Monitoring	June 2007
203	Final Quarterly Groundwater Monitoring Report Event 44 (March 2006)	May 2007
204	Draft Final Sediment Feasibility Study	March 2007
205	Final Soil Excavation and Off-Site Treatment/Disposal, and Installation of Oil Water Separator at Boiler Plant Site	March 2003
206	Draft T-25 Area Supplemental Remedial Investigation Report	March 2007
207	Final Work Plan, T-25 Area Supplemental Remedial Investigation	March 2007
208	Draft 2007 Fish/Sediment Sampling Work Plan	July 2007
209	Draft Removal Action Completion Report, Building 14 and Former Building 13	July 2007

Document	Title	Date
210	Draft Final T-25 Area Supplemental Remedial Investigation Report	July 2007
211	Draft Final T-25 Area Groundwater Treatment System 2005 Annual Report	March 2008
212	Draft Final T-25 Area Groundwater Treatment System 2006 Annual Report	April 2008
213	Draft Final 2007 Fish/Sediment Sampling Work Plan	September 2007
214	Draft Final Quarterly Groundwater Monitoring Report Event 47 (Fourth Quarter 2006)	March 2008
215	Final Record of Decision for Former Proposed Gymnasium Site and Buildings T-62 and T-68	September 2007
216	Draft Final Quarterly Groundwater Monitoring Report Event 45 (Second Quarter 2006)	October 2007
217	Final 2007 Fish/Sediment Sampling Work Plan	October 2007
218	Draft Final Explanation of Significant Differences for T-25 Area Groundwater (Operable Unit 1)	November 2007
219	Draft Feasibility Study for Buildings 63, 2, and 45	November 2007
220	Draft Quarterly Groundwater Monitoring Data Transmittal - Event 49 (Second Quarter 2007)	February 2008
221	Draft Final Quarterly Groundwater Monitoring Report - Event 46 (Third Quarter 2006)	November 2007
222	Draft Final Record of Decision for Soil at the T-25 Area, Building 14 and Former Building 13, and Boiler Plant	July 2008
223	Final Removal Action Completion Report, Building 14 and Former Building 13	January 2008
224	Memorandum - Groundwater Remedial Optimization Study at the T-25 Area Summary of Event 04 Post HRC-A Injection Groundwater Monitoring	January 2008
225	Final Proposed Plan for Soils at the T-25 Area, Building 14 and Former Building 13, and Boiler Plant	April 2008
226	Draft Final Quarterly Groundwater Monitoring Data Transmittal, Event 48 (First Quarter 2007)	March 2008
227	Draft Remedy Optimization Report for the T-25 Area Groundwater	March 2008

Document	Title	Date
228	Memorandum: Fall 2007 Fish and Sediment Sampling Program	April 2008
229	Final Groundwater Containment Demonstration Report for the Buildings 22 and 36 and Buildings 63, 2 and 45 Pilot Study	May 2008
230	Draft Long Term Monitoring Plan T-25 Area, Buildings 22 and 36 Area and Buildings 63, 2 and 45 Area	June 2008
231	Draft MW-114B Investigation Work Plan and Quality Assurance Project Plan (QAPP) Addendum	June 2008
232	Draft Quarterly Groundwater Monitoring Report Event 51 (Fourth Quarter 2007)	July 2008
233	Draft Quarterly Groundwater Monitoring Data Transmittal, Event 50 (Third Quarter 2007)	July 2008
234	Draft Work Plan Lake Cochituate Angler Survey, U.S. Army Soldier Systems Center (SSC), Natick, MA	July 2005
235	Draft Lake Cochituate Angler Survey Report, U.S. Army Soldier Systems Center (SSC), Natick, MA	January 2006

APPENDIX C

**SUMMARY OF SCREENING LEVEL RISK ASSESSMENT FOR BUILDING 14/FORMER
BUILDING 13 AND BOILER PLANT**

1.0 SUMMARY OF POTENTIAL RISKS AT BUILDING 14 AND FORMER BUILDING 13

Evaluations of human health risks associated with Building 14 and former Building 13 soils were performed by comparing site-related contaminant concentrations to risk-based MCP residential soil standards (S-1/GW-1). The risks discussed in this section are related to soil only. Potential risks associated with ground water and sediment exposures are addressed in separate decision documents.

While the area where contaminated subsurface soils were encountered near Building 14 was a paved area, it was assumed that exposure to these soils could have posed a potential risk to NSSC maintenance and/or construction workers. The area where contaminated surface soils were encountered near former Building 13 was grass-covered, and human exposure to these soils was possible. Building 14 and former Building 13 are also within an area designated by MADEP as a Zone II for the Town of Natick Springvale drinking water supply wells, located approximately 2,500 feet to the north-northwest of NSSC. Based on these facts, the conservative MCP residential soil standards (S-1/GW-1), also protective of groundwater supplies, were used for comparison to detected chemicals.

Several contaminants detected in soil samples from these areas exceeded MCP (S-1/GW-1) standards. However, the 2007 soil removal action at Building 14 and former Building 13 removed the soils exceeding these standards. Confirmatory samples taken at the excavation site were below action levels. Therefore potential human health risks associated with these soils have been eliminated.

1.1 Human Health Risk Assessment at Building 14 and Former Building 13

A screening-level HHRA was performed for soils at Building 14 and Former Building 13. Potential risks to human health associated with sediment and ground water exposure are being addressed in separate decision documents.

1.1.1 Hazard Identification at Building 14 and Former Building 13

The SI completed in 2004 indicated two areas of contamination present in the vicinity of Building 14 and the former Building 13. MCP S-1/GW-1 exceedances included nine PAHs and aromatic hydrocarbons in subsurface soil in a localized area to the south/southeast of Building 14 and six PAHs and four metals (beryllium, cadmium, chromium, and nickel) in the surface soil surrounding the former Building 13. Contamination in the Building 13 area was confined soils less than one foot bgs. The contamination south of Building 14 extended into the subsurface soil but was generally limited to 12 feet bgs or less. Pesticides, PCBs, and some VOCs were also identified the Building 14/13 soils but were detected at levels below MCP S-1/GW-1 standards.

A removal action was conducted in 2007 to address the contaminated soils in excess of MCP S-1/GW-1 standards identified during the SI. During the removal action, a portion of the Building 13 concrete incinerator foundation and associated piping were demolished.

Confirmation samples were collected from both excavations. All samples were analyzed for petroleum hydrocarbons (including PAHs), and samples from the former Building 13 area were additionally analyzed for pesticides, PCBs, and metals. No compounds were detected at concentrations above the cleanup MCP S-1/GW-1 standards. Tables C-1 and C-2 provide the results of the confirmation soil samples with a comparison to standards. Both excavations were backfilled with clean soil and compacted. The Building 14 area was repaved and the former Building 13 area was hydroseeded.

1.1.2 Exposure Assessment at Building 14 and Former Building 13

During the 2004 SI, before the 2007 removal action, the area where contaminated subsurface soils at Building 14 were encountered was paved over. It was determined that exposure to these soils could pose a potential risk to NSSC maintenance and/or construction workers. Migration of the PAHs in the soils at Building 14 could have occurred as a result of leaching by infiltration, and through soil erosion and transport by storm water runoff discharging to Lake Cochituate.

The area where contaminated surface soils were encountered near former Building 13 was grass-covered, and human exposure to these soils before their removal was possible. Migration of the PAHs, dieldrin, and beryllium could have occurred as a result of soil erosion and transport by storm water runoff discharging to Lake Cochituate. Contaminants in surficial soil could have also been transported by air during windy conditions, if the existing grass/vegetative cover throughout the study area had been disturbed (e.g., through construction activities).

1.1.3 Toxicity Assessment at Building 14 and Former Building 13

Evaluation of human health risks associated with Building 14 and Former Building 13 was performed by comparing site-related contaminant concentrations to MCP Method 1 risk-based standards (ICF Consulting, 2004, 2005), as agreed to by EPA and MADEP (ICF Consulting, 2003). The MCP Method 1 Standards represent levels of oil or hazardous materials at which no further remedial response actions would be required based upon the risk of harm posed by these chemicals. The standards are protective of public health, public welfare, and the environment (i.e., represent a condition of "no significant risk"), given the exposures assumed, and are measurable. S-1/GW-1 standards are based on residential use of the property and accessible soil, either currently or in the foreseeable future.

1.1.4 Risk Characterization for Building 14 and Former Building 13

Risk Characterization under MCP Method 1 is a comparison of site conditions to applicable soil and groundwater standards. If the concentration of a contaminant is greater than an applicable soil standard, then some form of remedial action is necessary. If, however, the concentrations reported at a site are lower than the applicable soil standards, then a level of No Significant Risk exists, and no further remedial action is required unless it is feasible to reduce the levels of contaminants closer to background.

An evaluation of human health risks associated with Building 14 and Former Building 13 was performed by comparing site-related contaminant concentrations to MCP Method 1 risk-based

standards (ICF Consulting, 2004, 2005). Although the area near Building 14 was paved, it was assumed that exposure to the contaminated subsurface soil could have posed a potential risk to NSSC maintenance and/or construction workers. Human exposure to the contaminated surface soil in the grass-covered Building 13 area was possible as well. Building 14 and former Building 13 are also within an area designated by MADEP as a Zone II for the Town of Natick Springvale drinking water supply wells, located approximately 2,500 feet to the north-northwest of NSSC. Based on these facts, the conservative MCP residential soil standards (S-1/GW-1), also protective of ground water supplies, were used for comparison to detected chemicals.

Several contaminants detected in soil samples from these areas exceeded the MCP S-1/GW-1 standards. However, the 2007 soil removal action at Building 14 and former Building 13 removed the soil exceeding these standards (ICF, 2008a). Tables C-1 and C-2 provide the results of the confirmation soil samples with a comparison to standards. Therefore, potential human health risks potentially associated with this soil has been eliminated.

1.1.5 Summary and Conclusions for Building 14 and Former Building 13

Several contaminants detected in soil samples from the Building 14 and Former Building 13 areas exceeded the MCP S-1/GW-1 standards. However, during the 2007 soil removal action at Building 14 and former Building 13 soil exceeding these standards was removed; therefore, potential human health risks potentially associated with this soil has been eliminated.

1.2 Ecological Risk Assessment

This section details the results of an ecological risk assessment performed at the Building 14 and Former Building 13, and only applies to site soils.

Because of its location, small size, and current industrial use, the area surrounding Building 14 and Former Building 13 does not constitute a significant terrestrial habitat or sensitive ecosystem. Contamination at Building 14 and Former Building 13 is not considered a threat to nearby animals or the food chain.

1.3 Basis for Remedial Action at Building 14 and Former Building 13

The soil removal action removed the soils exceeding standards. Based on the results of the confirmation sample results, No Further Action is necessary at the Building 14 and Former Building 13 soil.

2.0 SUMMARY OF POTENTIAL RISKS AT THE BOILER PLANT

A screening-level HHRA conducted in 2003 conducted comparisons to applicable MCP standards.

2.1 Human Health Risk Assessment at the Boiler Plant

A screening-level HHRA was performed at the Boiler Plant. This section details the results of the HHRA as they pertain to site soils. The risks discussed in this section are related to soil only.

Potential risks associated with ground water and sediment exposures are addressed in separate decision documents.

2.1.1 Hazard Identification at the Boiler Plant

The SI indicated the presence of PAHs and PCBs in soil at concentrations exceeding MCP S-1/GW-1 soil standards near Building 19, especially in the vicinity of the Boiler Plant leach field and in fill soils immediately southeast of the retaining wall. Exceedances were generally in the upper 10 feet of the soil column north of the retaining wall and in the upper 5 feet of the soil column south of the retaining wall. In addition, sporadic exceedances of MCP S-1 standards were observed for the pesticides gamma-BHC and dieldrin, EPH, and lead (Harding ESE, 2003).

A RAM was performed in 2001 at the former leach field to remove soils with PAH, PCB, lead and concentrations exceeding S-1/GW-1 standards. The confirmatory soil samples that were collected indicated that contaminant concentrations in soils remaining in place were below MCP S-1/GW-1 standards. Review of the RAM confirmatory sample analyses indicates that the removal action meets all current MCP S-1/GW-1 standards. Table C-3 provides the results of the confirmation soil samples with a comparison to standards.

2.1.2 Exposure Assessment at the Boiler Plant

The Phase I SI assumed that exposures to contaminated soil and ground water could occur at the Boiler Plant. Existing use exposures included NSSC workers and utility workers. Future use exposures included NSSC workers, utility workers, construction workers, commercial/industrial workers, recreational visitors, and residents. The HHRA assumed that there were no limitations on future land use conditions. The routes of exposure to soil by these receptors could include incidental ingestion, dermal contact, and dust inhalation. The soil concentrations used in the HHRA were from after the soil removal that was completed in 2001.

2.1.3 Toxicity Assessment at the Boiler Plant

Evaluation of human health risks associated with the Boiler Plant was performed by comparing site contaminant concentrations to MCP Method 1 risk-based standards (Harding ESE, 2003). These values were used for the evaluation of human health as agreed to by EPA and MADEP (HLA, 1998).

The MCP Method 1 Standards represent levels of oil or hazardous materials at which no further remedial response actions would be required based upon the risk of harm posed by these chemicals. The standards are protective of public health, public welfare, and the environment (i.e., represent a condition of "no significant risk"), given the exposures assumed, and are measurable. S-1/GW-1 standards are based on residential use of the property and accessible soil, either currently or in the foreseeable future.

2.1.4 Risk Characterization for the Boiler Plant

The MCP Risk Characterization under Method 1 is a comparison of site conditions to applicable soil and ground water standards. If the concentration of an oil or hazardous material is greater

than an applicable soil or ground water standard then some form of remedial action is necessary. If, however, the concentrations reported at a site are lower than the applicable soil or ground water standards, then a level of No Significant Risk exists, and no further remedial action is required unless it is feasible to reduce the levels of contaminants closer to background.

A risk characterization was performed during the Phase II SI (Harding ESE, 2003) to assess the risk of harm to health, safety, public welfare, and the environment posed by contaminants detected in soil, ground water, surface water, and sediment at the Boiler Plant Site. The primary goal of the risk characterization was to evaluate whether a level of No Significant Risk to public health, welfare, safety and the environment exists or has been achieved at the site.

The human health risk characterization concluded that oil and hazardous materials in soil do not exceed the applicable MCP Method 1 and Method 2 standards. Therefore, soil at the site is associated with a Condition of No Significant Risk for current and future land use (Harding ESE, 2003). The risk characterization also determined that no conditions at the site posed a threat of physical harm or bodily injury to people, and therefore, there is no threat to public safety at the site.

2.1.5 Summary and Conclusions for the Boiler Plant

The Phase II SI (Harding ESE, 2003) human health risk characterization concluded that oil and hazardous materials remaining in soil after the completion of the RAM did not exceed the applicable MCP Method 1 and Method 2 standards. Table C-3 provides the results of the confirmation soil samples with a comparison to standards. Therefore, soil at the site is associated with a Condition of No Significant Risk for current and future land use.

2.2 Ecological Risk Assessment at the Boiler Plant

This section details the results of the ecological risk assessment performed at the Boiler Plant, and only applies to site soils.

A Method 3, Stage I Environmental Screening (ES) was performed in accordance with the MCP [310 CMR 40.0995(3)] to characterize the potential risk of harm to the environment at the Boiler Plant Site (Harding ESE, 2003). The purpose of a Stage I ES is to identify conditions that do not warrant a more detailed characterization of potential environmental risks as evaluated in a Stage II environmental risk characterization. The Stage I ES consisted of two major components:

- Identification of all potentially complete exposure pathways that represent a link between a contaminant source and environmental receptors, and
- For each potentially complete exposure pathway, a determination whether such current or potential future exposures are potentially significant or have resulted in readily apparent environmental harm.

For terrestrial habitats, the Stage I screening includes an evaluation of habitat quality. As per MCP guidance, no significant exposures or risks to terrestrial populations or communities are considered likely, and no further assessment of terrestrial habitats is necessary, if the following conditions are met:

- (1) no state-listed threatened or endangered species or other species of special concern are known to occur in the area;
- (2) no contaminant transport from surface soil to an Area of Critical Environmental Concern (ACEC) is known to occur; and
- (3) the undeveloped portion (i.e., open land, characterized by the presence of native vegetation, excluding landscaped residential and commercial parcels) of the affected area is less than 2 acres or the undeveloped area is less than 6 acres and site conditions indicate no potentially significant habitat (MADEP, 1996).

The Stage I ES determined that there are no known threatened or endangered terrestrial species or ACECs at the Boiler Plant site, and the site contains less than two acres of potentially affected, undeveloped habitat. Therefore, the three conditions outlined above were met, and no further evaluation of terrestrial habitat was deemed necessary. The Stage I ES determined that no complete migration pathway existed for terrestrial biota at the site, as there is no suitable terrestrial habitat for terrestrial receptors. Thus, the Stage I ES concluded that there is no significant risk of harm to terrestrial ecological receptors at the Boiler Plant Site (Harding ESE, 2003).

2.3 Basis for Remedial Action at the Boiler Plant

The soil removal action removed the soils exceeding standards. Based on the results of the confirmation sampling and screening-level HHRA, No Further Action is necessary at the Boiler Plant soils.

Table C-1

Confirmatory Soil Sample Data - Building 14

Removal Action, Building 14 and Former Building 13, US Army SSC, Natick, MA

Sample Location Name Sample Identifier QC Type Date Collected Media Depth	MCP S-1/GW-1 (2006)	Region 9 PRG - Soil (2004)	EX-001 EX001X01 Field Sample 1/8/2007 Soil 0-1 ft	EX-002 EX002X03 Field Sample 1/8/2007 Soil 2-3 ft	EX-003 EX003X06 Field Sample 1/8/2007 Soil 5-6 ft	EX-004 EX004X07 Field Sample 1/8/2007 Soil 5-7 ft	EX-005 EX005X02 Field Sample 1/8/2007 Soil 1-2 ft	EX-006 EX006X07 Field Sample 1/8/2007 Soil 5-7 ft
EPH MADEP								
2-Methylnaphthalene	4 mg/kg	NA	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Acenaphthene	20 mg/kg	3700 mg/kg	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Acenaphthylene	100 mg/kg	NA	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Anthracene	1000 mg/kg	22000 mg/kg	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Benzo(a)anthracene	7 mg/kg	0.62 mg/kg	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Benzo(a)pyrene	2 mg/kg	0.062 mg/kg	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Benzo(b)fluoranthene	7 mg/kg	0.62 mg/kg	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Benzo(g,h,i)perylene	1000 mg/kg	NA	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Benzo(k)fluoranthene	70 mg/kg	6.2 mg/kg	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
C11-C22 Aromatics	200 mg/kg	NA	7.66 U mg/kg	7.02 U mg/kg	7.02 U mg/kg	7.25 U mg/kg	7.09 U mg/kg	7.02 U mg/kg
C19-C36 Aliphatics	2500 mg/kg	NA	7.66 U mg/kg	7.02 U mg/kg	7.02 U mg/kg	7.25 U mg/kg	7.09 U mg/kg	7.02 U mg/kg
C9-C18 Aliphatics	1000 mg/kg	NA	7.66 U mg/kg	7.02 U mg/kg	7.02 U mg/kg	7.25 U mg/kg	7.09 U mg/kg	7.02 U mg/kg
Chrysene	7 mg/kg	62 mg/kg	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Dibenzo(a,h)anthracene	0.7 mg/kg	0.062 mg/kg	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Fluoranthene	1000 mg/kg	2300 mg/kg	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Fluorene	400 mg/kg	2700 mg/kg	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Indeno(1,2,3-cd)pyrene	7 mg/kg	0.62 mg/kg	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Naphthalene	4 mg/kg	56 mg/kg	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Phenanthrene	700 mg/kg	NA	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg
Pyrene	1000 mg/kg	2300 mg/kg	0.383 U mg/kg	0.351 U mg/kg	0.351 U mg/kg	0.362 U mg/kg	0.355 U mg/kg	0.351 U mg/kg

U = Not Detected J = Estimated R = Rejected

Shaded results exceed MCP S-1/GW-1 (2006) criteria.

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Table C-1

Confirmatory Soil Sample Data - Building 14

Removal Action, Building 14 and Former Building 13, US Army SSC, Natick, MA

Sample Location Name	MCP S-1/GW-1 (2006)	Region 9 PRG - Soil (2004)	EX-007 EX007X06 Field Sample 1/8/2007 Soil 4-6 ft	EX-008 EX008X02 Field Sample 1/8/2007 Soil 1-2 ft	EX-009 EX009X01 Field Sample 1/10/2007 Soil 0-1 ft	EX-010 EX010X06 Field Sample 1/10/2007 Soil 4-6 ft	EX-011 EX011X15 Field Sample 1/18/2007 Soil 13-15 ft	EX-012 EX012X15 Field Sample 1/18/2007 Soil 13-15 ft
Sample Identifier								
QC Type								
Date Collected								
Media								
Depth								

EPH MADEP									
2-Methylnaphthalene	4	mg/kg	NA	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U	mg/kg
Acenaphthene	20	mg/kg	3700	mg/kg	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U
Acenaphthylene	100	mg/kg	NA	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U	mg/kg
Anthracene	1000	mg/kg	22000	mg/kg	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U
Benzo(a)anthracene	7	mg/kg	0.62	mg/kg	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U
Benzo(a)pyrene	2	mg/kg	0.062	mg/kg	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U
Benzo(b)fluoranthene	7	mg/kg	0.62	mg/kg	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U
Benzo(g,h,i)perylene	1000	mg/kg	NA	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U	mg/kg
Benzo(k)fluoranthene	70	mg/kg	6.2	mg/kg	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U
C11-C22 Aromatics	200	mg/kg	NA	7.25 U	mg/kg	7.33 U	mg/kg	7.09 U	mg/kg
C19-C36 Aliphatics	2500	mg/kg	NA	7.25 U	mg/kg	7.33 U	mg/kg	7.09 U	mg/kg
C9-C18 Aliphatics	1000	mg/kg	NA	7.25 U	mg/kg	7.33 U	mg/kg	7.09 U	mg/kg
Chrysene	7	mg/kg	62	mg/kg	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U
Dibenzo(a,h)anthracene	0.7	mg/kg	0.062	mg/kg	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U
Fluoranthene	1000	mg/kg	2300	mg/kg	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U
Fluorene	400	mg/kg	2700	mg/kg	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U
Indeno(1,2,3-cd)pyrene	7	mg/kg	0.62	mg/kg	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U
Naphthalene	4	mg/kg	56	mg/kg	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U
Phenanthrene	700	mg/kg	NA	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U	mg/kg
Pyrene	1000	mg/kg	2300	mg/kg	0.362 U	mg/kg	0.366 U	mg/kg	0.355 U

U = Not Detected J = Estimated R = Rejected

Shaded results exceed MCP S-1/GW-1 (2006) criteria.

30 November 2007

STARS / rptDataSummary_TwoCriteria / Reporter / 11.1

Table C-1

Confirmatory Soil Sample Data - Building 14

Removal Action, Building 14 and Former Building 13, US Army SSC, Natick, MA

Sample Location Name	MCP S-1/GW-1 (2006)	Region 9 PRG - Soil (2004)	EX-013 EX013X11 Field Sample 1/18/2007 Soil 11 ft	EX-014 EX014X13 Field Sample 1/18/2007 Soil 13 ft	EX-015 EX015X12 Field Sample 1/18/2007 Soil 12 ft	EX-016 EX016X08 Field Sample 1/18/2007 Soil 6-8 ft	EX-017 EX017X06 Field Sample 1/18/2007 Soil 4-6 ft	EX-018 EX018X09 Field Sample 1/18/2007 Soil 9 ft
Sample Identifier								
QC Type								
Date Collected								
Media								
Depth								

EPH MADEP																
2-Methylnaphthalene	4	mg/kg	NA		0.402 U	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Acenaphthene	20	mg/kg	3700	mg/kg	0.402 U	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Acenaphthylene	100	mg/kg	NA		0.402 U	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Anthracene	1000	mg/kg	22000	mg/kg	0.402 U	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Benzo(a)anthracene	7	mg/kg	0.62	mg/kg	0.457	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Benzo(a)pyrene	2	mg/kg	0.062	mg/kg	0.509	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Benzo(b)fluoranthene	7	mg/kg	0.62	mg/kg	0.454	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Benzo(g,h,i)perylene	1000	mg/kg	NA		0.43	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Benzo(k)fluoranthene	70	mg/kg	6.2	mg/kg	0.42	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
C11-C22 Aromatics	200	mg/kg	NA		19	mg/kg	6.87 U	mg/kg	7.33 U	mg/kg	7.49 U	mg/kg	8.33 U	mg/kg	6.94 U	mg/kg
C19-C36 Aliphatics	2500	mg/kg	NA		8.03 U	mg/kg	6.87 U	mg/kg	7.33 U	mg/kg	7.49 U	mg/kg	8.33 U	mg/kg	6.94 U	mg/kg
C9-C18 Aliphatics	1000	mg/kg	NA		8.03 U	mg/kg	6.87 U	mg/kg	7.33 U	mg/kg	7.49 U	mg/kg	8.33 U	mg/kg	6.94 U	mg/kg
Chrysene	7	mg/kg	62	mg/kg	0.52	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Dibenzo(a,h)anthracene	0.7	mg/kg	0.062	mg/kg	0.402 U	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Fluoranthene	1000	mg/kg	2300	mg/kg	0.928	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Fluorene	400	mg/kg	2700	mg/kg	0.402 U	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Indeno(1,2,3-cd)pyrene	7	mg/kg	0.62	mg/kg	0.405	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Naphthalene	4	mg/kg	56	mg/kg	0.402 U	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Phenanthrene	700	mg/kg	NA		0.402 U	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg
Pyrene	1000	mg/kg	2300	mg/kg	0.835	mg/kg	0.344 U	mg/kg	0.366 U	mg/kg	0.374 U	mg/kg	0.417 U	mg/kg	0.347 U	mg/kg

U = Not Detected J = Estimated R = Rejected

Shaded results exceed MCP S-1/GW-1 (2006) criteria.

Table C-1

Confirmatory Soil Sample Data - Building 14

Removal Action, Building 14 and Former Building 13, US Army SSC, Natick, MA

Sample Location Name Sample Identifier QC Type Date Collected Media Depth	MCP S-1/GW-1 (2006)	Region 9 PRG - Soil (2004)	EX-019 EX019X11 Field Sample 1/18/2007 Soil 11 ft					
EPH MADEP								
2-Methylnaphthalene	4 mg/kg	NA	0.362 U mg/kg	-	-	-	-	-
Acenaphthene	20 mg/kg	3700 mg/kg	0.362 U mg/kg	-	-	-	-	-
Acenaphthylene	100 mg/kg	NA	0.362 U mg/kg	-	-	-	-	-
Anthracene	1000 mg/kg	22000 mg/kg	0.362 U mg/kg	-	-	-	-	-
Benzo(a)anthracene	7 mg/kg	0.62 mg/kg	0.362 U mg/kg	-	-	-	-	-
Benzo(a)pyrene	2 mg/kg	0.062 mg/kg	0.362 U mg/kg	-	-	-	-	-
Benzo(b)fluoranthene	7 mg/kg	0.62 mg/kg	0.362 U mg/kg	-	-	-	-	-
Benzo(g,h,i)perylene	1000 mg/kg	NA	0.362 U mg/kg	-	-	-	-	-
Benzo(k)fluoranthene	70 mg/kg	6.2 mg/kg	0.362 U mg/kg	-	-	-	-	-
C11-C22 Aromatics	200 mg/kg	NA	7.25 U mg/kg	-	-	-	-	-
C19-C36 Aliphatics	2500 mg/kg	NA	7.25 U mg/kg	-	-	-	-	-
C9-C18 Aliphatics	1000 mg/kg	NA	7.25 U mg/kg	-	-	-	-	-
Chrysene	7 mg/kg	62 mg/kg	0.362 U mg/kg	-	-	-	-	-
Dibenzo(a,h)anthracene	0.7 mg/kg	0.062 mg/kg	0.362 U mg/kg	-	-	-	-	-
Fluoranthene	1000 mg/kg	2300 mg/kg	0.362 U mg/kg	-	-	-	-	-
Fluorene	400 mg/kg	2700 mg/kg	0.362 U mg/kg	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	7 mg/kg	0.62 mg/kg	0.362 U mg/kg	-	-	-	-	-
Naphthalene	4 mg/kg	56 mg/kg	0.362 U mg/kg	-	-	-	-	-
Phenanthrene	700 mg/kg	NA	0.362 U mg/kg	-	-	-	-	-
Pyrene	1000 mg/kg	2300 mg/kg	0.362 U mg/kg	-	-	-	-	-

U = Not Detected J = Estimated R = Rejected

Shaded results exceed MCP S-1/GW-1 (2006) criteria.

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Table C-2

Confirmatory Soil Sample Data - Building 13

Removal Action, Building 14 and Former Building 13, US Army SSC, Natick, MA

Sample Location Name	MCP S-1/GW-1 (2006)	Region 9 PRG - Soil (2004)	SS-103 SX103X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-104 SX104X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-105 SX105X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-106 SX106X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-107 SX107X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-108 SX108X01 Field Sample 1/22/2007 Soil 1-1.5 ft
Sample Identifier								
QC Type								
Date Collected								
Media								
Depth								

EPH MADEP																
2-Methylnaphthalene	4	mg/kg	NA	0.370 U	mg/kg	0.379 U	mg/kg	0.374 U	mg/kg	0.374 U	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg	
Acenaphthene	20	mg/kg	3700	mg/kg	0.370 U	mg/kg	0.379 U	mg/kg	0.374 U	mg/kg	0.374 U	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg
Acenaphthylene	100	mg/kg	NA	0.370 U	mg/kg	0.379 U	mg/kg	0.374 U	mg/kg	0.374 U	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg	
Anthracene	1000	mg/kg	22000	mg/kg	0.370 U	mg/kg	0.379 U	mg/kg	0.374 U	mg/kg	0.374 U	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg
Benzo(a)anthracene	7	mg/kg	0.62	mg/kg	0.372	mg/kg	1.18	mg/kg	0.374 U	mg/kg	0.374 U	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg
Benzo(a)pyrene	2	mg/kg	0.062	mg/kg	0.370 U	mg/kg	1.27	mg/kg	0.374 U	mg/kg	0.374 U	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg
Benzo(b)fluoranthene	7	mg/kg	0.62	mg/kg	0.418	mg/kg	1.36	mg/kg	0.374 U	mg/kg	0.411	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg
Benzo(g,h,i)perylene	1000	mg/kg	NA	0.370 U	mg/kg	1.16	mg/kg	0.374 U	mg/kg	0.374 U	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg	
Benzo(k)fluoranthene	70	mg/kg	6.2	mg/kg	0.370 U	mg/kg	1.13	mg/kg	0.374 U	mg/kg	0.374 U	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg
C11-C22 Aromatics	200	mg/kg	NA	12.0	mg/kg	28.0	mg/kg	7.49 U	mg/kg	12.4	mg/kg	7.09 U	mg/kg	7.41	mg/kg	
C19-C36 Aliphatics	2500	mg/kg	NA	7.41 U	mg/kg	7.58 U	mg/kg	7.49 U	mg/kg	7.49 U	mg/kg	7.09 U	mg/kg	7.33 U	mg/kg	
C9-C18 Aliphatics	1000	mg/kg	NA	7.41 U	mg/kg	7.58 U	mg/kg	7.49 U	mg/kg	7.49 U	mg/kg	7.09 U	mg/kg	7.33 U	mg/kg	
Chrysene	7	mg/kg	62	mg/kg	0.446	mg/kg	1.29	mg/kg	0.374 U	mg/kg	0.394	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg
Dibenzo(a,h)anthracene	0.7	mg/kg	0.062	mg/kg	0.370 U	mg/kg	0.379 U	mg/kg	0.374 U	mg/kg	0.374 U	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg
Fluoranthene	1000	mg/kg	2300	mg/kg	0.707	mg/kg	1.40	mg/kg	0.374 U	mg/kg	0.678	mg/kg	0.355 U	mg/kg	0.429	mg/kg
Fluorene	400	mg/kg	2700	mg/kg	0.370 U	mg/kg	0.379 U	mg/kg	0.374 U	mg/kg	0.374 U	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg
Indeno(1,2,3-cd)pyrene	7	mg/kg	0.62	mg/kg	0.370 U	mg/kg	1.14	mg/kg	0.374 U	mg/kg	0.374 U	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg
Naphthalene	4	mg/kg	56	mg/kg	0.370 U	mg/kg	0.379 U	mg/kg	0.374 U	mg/kg	0.374 U	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg
Phenanthrene	700	mg/kg	NA	0.370 U	mg/kg	0.379 U	mg/kg	0.374 U	mg/kg	0.374 U	mg/kg	0.355 U	mg/kg	0.366 U	mg/kg	
Pyrene	1000	mg/kg	2300	mg/kg	0.628	mg/kg	1.42	mg/kg	0.374 U	mg/kg	0.603	mg/kg	0.355 U	mg/kg	0.370	mg/kg

U = Not Detected J = Estimated R = Rejected

Shaded results exceed MCP S-1/GW-1 (2006) criteria.

30 November 2007

Table C-2

Confirmatory Soil Sample Data - Building 13

Removal Action, Building 14 and Former Building 13, US Army SSC, Natick, MA

Sample Location Name Sample Identifier QC Type Date Collected Media Depth	MCP S-1/GW-1 (2006)	Region 9 PRG - Soil (2004)	SS-109 SX109X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-110 SX110X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-111 SX111X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-112 SX112X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-113 SX113X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-114 SX114X01 Field Sample 1/22/2007 Soil 1-1.5 ft
EPH MADEP								
2-Methylnaphthalene	4 mg/kg	NA	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Acenaphthene	20 mg/kg	3700 mg/kg	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Acenaphthylene	100 mg/kg	NA	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Anthracene	1000 mg/kg	22000 mg/kg	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Benzo(a)anthracene	7 mg/kg	0.62 mg/kg	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Benzo(a)pyrene	2 mg/kg	0.062 mg/kg	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Benzo(b)fluoranthene	7 mg/kg	0.62 mg/kg	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Benzo(g,h,i)perylene	1000 mg/kg	NA	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Benzo(k)fluoranthene	70 mg/kg	6.2 mg/kg	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
C11-C22 Aromatics	200 mg/kg	NA	6.94 U mg/kg	7.17 U mg/kg	7.17 U mg/kg	7.02 U mg/kg	6.87 U mg/kg	7.58 U mg/kg
C19-C36 Aliphatics	2500 mg/kg	NA	6.94 U mg/kg	7.17 U mg/kg	7.17 U mg/kg	7.02 U mg/kg	6.87 U mg/kg	7.58 U mg/kg
C9-C18 Aliphatics	1000 mg/kg	NA	6.94 U mg/kg	7.17 U mg/kg	7.17 U mg/kg	7.02 U mg/kg	6.87 U mg/kg	7.58 U mg/kg
Chrysene	7 mg/kg	62 mg/kg	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Dibenzo(a,h)anthracene	0.7 mg/kg	0.062 mg/kg	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Fluoranthene	1000 mg/kg	2300 mg/kg	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Fluorene	400 mg/kg	2700 mg/kg	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Indeno(1,2,3-cd)pyrene	7 mg/kg	0.62 mg/kg	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Naphthalene	4 mg/kg	56 mg/kg	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Phenanthrene	700 mg/kg	NA	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg
Pyrene	1000 mg/kg	2300 mg/kg	0.347 U mg/kg	0.358 U mg/kg	0.358 U mg/kg	0.351 U mg/kg	0.344 U mg/kg	0.379 U mg/kg

U = Not Detected J = Estimated R = Rejected

Shaded results exceed MCP S-1/GW-1 (2006) criteria.

30 November 2007

Table C-2

Confirmatory Soil Sample Data - Building 13

Removal Action, Building 14 and Former Building 13, US Army SSC, Natick, MA

Sample Location Name	MCP S-1/GW-1 (2006)	Region 9 PRG - Soil (2004)	SS-115 SX115X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-116 SX116X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-117 SX117X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-118 SX118X01 Field Sample 1/29/2007 Soil 1-1.5 ft	SS-119 SX119X01 Field Sample 1/29/2007 Soil 1-1.5 ft	SS-120 SX120X01 Field Sample 1/29/2007 Soil 1-1.5 ft
Sample Identifier								
QC Type								
Date Collected								
Media								
Depth								

EPH MADEP									
2-Methylnaphthalene	4	mg/kg	NA	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U	mg/kg
Acenaphthene	20	mg/kg	3700	mg/kg	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U
Acenaphthylene	100	mg/kg	NA	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U	mg/kg
Anthracene	1000	mg/kg	22000	mg/kg	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U
Benzo(a)anthracene	7	mg/kg	0.62	mg/kg	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U
Benzo(a)pyrene	2	mg/kg	0.062	mg/kg	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U
Benzo(b)fluoranthene	7	mg/kg	0.62	mg/kg	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U
Benzo(g,h,i)perylene	1000	mg/kg	NA	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U	mg/kg
Benzo(k)fluoranthene	70	mg/kg	6.2	mg/kg	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U
C11-C22 Aromatics	200	mg/kg	NA	7.74	mg/kg	7.25 U	mg/kg	6.94 U	mg/kg
C19-C36 Aliphatics	2500	mg/kg	NA	7.09 U	mg/kg	7.25 U	mg/kg	6.94 U	mg/kg
C9-C18 Aliphatics	1000	mg/kg	NA	7.09 U	mg/kg	7.25 U	mg/kg	6.94 U	mg/kg
Chrysene	7	mg/kg	62	mg/kg	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U
Dibenzo(a,h)anthracene	0.7	mg/kg	0.062	mg/kg	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U
Fluoranthene	1000	mg/kg	2300	mg/kg	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U
Fluorene	400	mg/kg	2700	mg/kg	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U
Indeno(1,2,3-cd)pyrene	7	mg/kg	0.62	mg/kg	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U
Naphthalene	4	mg/kg	56	mg/kg	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U
Phenanthrene	700	mg/kg	NA	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U	mg/kg
Pyrene	1000	mg/kg	2300	mg/kg	0.355 U	mg/kg	0.362 U	mg/kg	0.347 U

U = Not Detected J = Estimated R = Rejected

Shaded results exceed MCP S-1/GW-1 (2006) criteria.

30 November 2007

Table C-2

Confirmatory Soil Sample Data - Building 13

Removal Action, Building 14 and Former Building 13, US Army SSC, Natick, MA

Sample Location Name Sample Identifier QC Type Date Collected Media Depth	MCP S-1/GW-1 (2006)		Region 9 PRG - Soil (20040)		SS-105 SX105X01 Field Sample 1/22/2007 Soil 1-1.5 ft		SS-108 SX108X01 Field Sample 1/22/2007 Soil 1-1.5 ft		SS-110 SX110X01 Field Sample 1/22/2007 Soil 1-1.5 ft		SS-112 SX112X01 Field Sample 1/22/2007 Soil 1-1.5 ft		SS-113 SX113X01 Field Sample 1/22/2007 Soil 1-1.5 ft		SS-114 SX114X01 Field Sample 1/22/2007 Soil 1-1.5 ft	
PCB-Aroclors																
Aroclor-1016	2000	ug/kg	3900	ug/kg	4.2 U	ug/Kg	4.2 U	ug/Kg	4.0 U	ug/Kg	4.1 U	ug/Kg	3.7 U	ug/Kg	4.2 U	ug/Kg
Aroclor-1221	2000	ug/kg	3900	ug/kg	4.2 U	ug/Kg	4.2 U	ug/Kg	4.0 U	ug/Kg	4.1 U	ug/Kg	3.7 U	ug/Kg	4.2 U	ug/Kg
Aroclor-1232	2000	ug/kg	3900	ug/kg	4.2 U	ug/Kg	4.2 U	ug/Kg	4.0 U	ug/Kg	4.1 U	ug/Kg	3.7 U	ug/Kg	4.2 U	ug/Kg
Aroclor-1242	2000	ug/kg	3900	ug/kg	4.2 U	ug/Kg	4.2 U	ug/Kg	4.0 U	ug/Kg	4.1 U	ug/Kg	3.7 U	ug/Kg	4.2 U	ug/Kg
Aroclor-1248	2000	ug/kg	3900	ug/kg	4.2 U	ug/Kg	4.2 U	ug/Kg	4.0 U	ug/Kg	4.1 U	ug/Kg	3.7 U	ug/Kg	4.2 U	ug/Kg
Aroclor-1254	2000	ug/kg	220	ug/kg	4.2 U	ug/Kg	4.2 U	ug/Kg	4.0 U	ug/Kg	4.1 U	ug/Kg	3.7 U	ug/Kg	4.2 U	ug/Kg
Aroclor-1260	2000	ug/kg	220	ug/kg	4.2 U	ug/Kg	4.2 U	ug/Kg	4.0 U	ug/Kg	4.1 U	ug/Kg	3.7 U	ug/Kg	4.2 U	ug/Kg
Pesticides																
4,4 -DDD	4000	ug/kg	2400	ug/kg	R	ug/Kg	1.4	ug/Kg	2.1	ug/Kg	5.2 J	ug/Kg	0.57	ug/Kg	6.4	ug/Kg
4,4 -DDE	3000	ug/kg	1700	ug/kg	11	ug/Kg	36	ug/Kg	9.4	ug/Kg	57	ug/Kg	5.3	ug/Kg	150	ug/Kg
4,4 -DDT	3000	ug/kg	1700	ug/kg	7.0	ug/Kg	25	ug/Kg	54	ug/Kg	180	ug/Kg	18	ug/Kg	290	ug/Kg
Aldrin	40	ug/kg	29	ug/kg	0.10 U	ug/Kg	0.11 U	ug/Kg	0.20 U	ug/Kg	0.51 U	ug/Kg	0.092 U	ug/Kg	1.0 U	ug/Kg
alpha-BHC	NA		9	ug/kg	0.10 U	ug/Kg	0.11 U	ug/Kg	0.20 U	ug/Kg	0.51 U	ug/Kg	0.092 U	ug/Kg	1.0 U	ug/Kg
alpha-Chlordane	700	ug/kg	1600	ug/kg	4.2	ug/Kg	8.7	ug/Kg	4.2	ug/Kg	99	ug/Kg	1.3	ug/Kg	9.3	ug/Kg
beta-BHC	NA		320	ug/kg	0.10 U	ug/Kg	0.11 U	ug/Kg	0.20 U	ug/Kg	0.51 U	ug/Kg	0.092 U	ug/Kg	1.0 U	ug/Kg
delta-BHC	NA		NA		0.10 U	ug/Kg	0.11 U	ug/Kg	0.20 U	ug/Kg	0.51 U	ug/Kg	0.092 U	ug/Kg	1.0 U	ug/Kg
Dieldrin	50	ug/kg	30.0	ug/kg	0.20 J	ug/Kg	0.54 J	ug/Kg	0.44	ug/Kg	3.7	ug/Kg	0.22	ug/Kg	1.5	ug/Kg
Endosulfan I	500	ug/kg	370000	ug/kg	0.10 U	ug/Kg	0.11 U	ug/Kg	0.20 U	ug/Kg	0.51 U	ug/Kg	0.092 U	ug/Kg	1.0 U	ug/Kg
Endosulfan II	500	ug/kg	370000	ug/kg	0.10 U	ug/Kg	0.11 U	ug/Kg	0.20 U	ug/Kg	0.51 U	ug/Kg	0.092 U	ug/Kg	1.0 U	ug/Kg
Endosulfan Sulfate	500	ug/kg	370000	ug/kg	0.50 J	ug/Kg	0.11 U	ug/Kg	0.54 J	ug/Kg	1.0 J	ug/Kg	0.092 U	ug/Kg	1.0 U	ug/Kg
Endrin	8000	ug/kg	18000	ug/kg	0.10 U	ug/Kg	0.11 U	ug/Kg	0.20 U	ug/Kg	0.51 U	ug/Kg	0.092 U	ug/Kg	1.0 U	ug/Kg
Endrin aldehyde	8000	ug/kg	18000	ug/kg	0.10 U	ug/Kg	0.11 U	ug/Kg	0.20 U	ug/Kg	0.51 U	ug/Kg	0.092 U	ug/Kg	1.0 U	ug/Kg
Endrin Ketone	8000	ug/kg	18000	ug/kg	0.48	ug/Kg	0.11	ug/Kg	0.20 U	ug/Kg	1.4	ug/Kg	0.092 U	ug/Kg	2.9	ug/Kg
gamma-BHC	3	ug/kg	440	ug/kg	0.10 U	ug/Kg	0.11 U	ug/Kg	0.20 U	ug/Kg	0.51 U	ug/Kg	0.092 U	ug/Kg	1.0 U	ug/Kg
gamma-Chlordane	700	ug/kg	1600	ug/kg	3.2	ug/Kg	6.7	ug/Kg	4.0	ug/Kg	110	ug/Kg	1.4	ug/Kg	6.8	ug/Kg
Heptachlor	200	ug/kg	110	ug/kg	0.10 U	ug/Kg	0.11 U	ug/Kg	0.20 U	ug/Kg	3.7	ug/Kg	0.092 U	ug/Kg	1.0 U	ug/Kg
Heptachlor Epoxide	90	ug/kg	53	ug/kg	0.36	ug/Kg	R	ug/Kg	0.58 J	ug/Kg	10 J	ug/Kg	R	ug/Kg	R	ug/Kg
Methoxychlor	100000	ug/kg	310000	ug/kg	2.2 J	ug/Kg	2.0 J	ug/Kg	1.0 J	ug/Kg	2.1 J	ug/Kg	0.92 J	ug/Kg	13 J	ug/Kg
Toxaphene	NA		440	ug/kg	5.2 U	ug/Kg	5.2 U	ug/Kg	9.9 U	ug/Kg	26 U	ug/Kg	4.6 U	ug/Kg	52 U	ug/Kg

U = Not Detected J = Estimated R = Rejected

Shaded results exceed MCP S-1/GW-1 (2006) criteria.

Table C-2

Confirmatory Soil Sample Data - Building 13

Removal Action, Building 14 and Former Building 13, US Army SSC, Natick, MA

Sample Location Name Sample Identifier QC Type Date Collected Media Depth	MCP S-1/GW-1 (2006)		Region 9 PRG - Soil (20040)		SS-115 SX115X01 Field Sample 1/22/2007 Soil 1-1.5 ft		SS-117 SX117X01 Field Sample 1/22/2007 Soil 1-1.5 ft					
PCB-Aroclors												
Aroclor-1016	2000	ug/kg	3900	ug/kg	4.0 U	ug/Kg	3.8 U	ug/Kg	-	-	-	-
Aroclor-1221	2000	ug/kg	3900	ug/kg	4.0 U	ug/Kg	3.8 U	ug/Kg	-	-	-	-
Aroclor-1232	2000	ug/kg	3900	ug/kg	4.0 U	ug/Kg	3.8 U	ug/Kg	-	-	-	-
Aroclor-1242	2000	ug/kg	3900	ug/kg	4.0 U	ug/Kg	3.8 U	ug/Kg	-	-	-	-
Aroclor-1248	2000	ug/kg	3900	ug/kg	4.0 U	ug/Kg	3.8 U	ug/Kg	-	-	-	-
Aroclor-1254	2000	ug/kg	220	ug/kg	4.0 U	ug/Kg	3.8 U	ug/Kg	-	-	-	-
Aroclor-1260	2000	ug/kg	220	ug/kg	4.0 U	ug/Kg	3.8 U	ug/Kg	-	-	-	-
Pesticides												
4,4 -DDD	4000	ug/kg	2400	ug/kg	8.7	ug/Kg	0.26	ug/Kg	-	-	-	-
4,4 -DDE	3000	ug/kg	1700	ug/kg	110	ug/Kg	5.7	ug/Kg	-	-	-	-
4,4 -DDT	3000	ug/kg	1700	ug/kg	290	ug/Kg	19	ug/Kg	-	-	-	-
Aldrin	40	ug/kg	29	ug/kg	R	ug/Kg	0.094 U	ug/Kg	-	-	-	-
alpha-BHC	NA		9	ug/kg	0.99 U	ug/Kg	0.094 U	ug/Kg	-	-	-	-
alpha-Chlordane	700	ug/kg	1600	ug/kg	130	ug/Kg	2.1	ug/Kg	-	-	-	-
beta-BHC	NA		320	ug/kg	0.99 U	ug/Kg	0.094 U	ug/Kg	-	-	-	-
delta-BHC	NA		NA		0.99 U	ug/Kg	0.094 U	ug/Kg	-	-	-	-
Dieldrin	50	ug/kg	30.0	ug/kg	6.5	ug/Kg	0.34 J	ug/Kg	-	-	-	-
Endosulfan I	500	ug/kg	370000	ug/kg	0.99 U	ug/Kg	0.094 U	ug/Kg	-	-	-	-
Endosulfan II	500	ug/kg	370000	ug/kg	0.99 U	ug/Kg	0.094 U	ug/Kg	-	-	-	-
Endosulfan Sulfate	500	ug/kg	370000	ug/kg	1.8 J	ug/Kg	0.34 J	ug/Kg	-	-	-	-
Endrin	8000	ug/kg	18000	ug/kg	0.99 U	ug/Kg	0.094 U	ug/Kg	-	-	-	-
Endrin aldehyde	8000	ug/kg	18000	ug/kg	0.99 U	ug/Kg	0.094 U	ug/Kg	-	-	-	-
Endrin Ketone	8000	ug/kg	18000	ug/kg	2.0 J	ug/Kg	0.094 U	ug/Kg	-	-	-	-
gamma-BHC	3	ug/kg	440	ug/kg	0.99 U	ug/Kg	0.094 U	ug/Kg	-	-	-	-
gamma-Chlordane	700	ug/kg	1600	ug/kg	150	ug/Kg	1.5	ug/Kg	-	-	-	-
Heptachlor	200	ug/kg	110	ug/kg	5.0	ug/Kg	0.094 U	ug/Kg	-	-	-	-
Heptachlor Epoxide	90	ug/kg	53	ug/kg	37	ug/Kg	R	ug/Kg	-	-	-	-
Methoxychlor	100000	ug/kg	310000	ug/kg	2.0 UJ	ug/Kg	1.0 J	ug/Kg	-	-	-	-
Toxaphene	NA		440	ug/kg	50 U	ug/Kg	4.7 U	ug/Kg	-	-	-	-

U = Not Detected J = Estimated R = Rejected

Shaded results exceed MCP S-1/GW-1 (2006) criteria.

Table C-2

Confirmatory Soil Sample Data - Building 13

Removal Action, Building 14 and Former Building 13, US Army SSC, Natick, MA

Sample Location Name	MCP S-1/GW-1 (2006)	Region 9 PRG - Soil (2004)	SS-105 SX105X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-108 SX108X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-110 SX110X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-112 SX112X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-113 SX113X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-114 SX114X01 Field Sample 1/22/2007 Soil 1-1.5 ft
Sample Identifier								
QC Type								
Date Collected								
Media								
Depth								
Metals								
Aluminum	NA	76000 mg/kg	9400 mg/Kg	6900 mg/Kg	6600 mg/Kg	6000 mg/Kg	4900 mg/Kg	8800 mg/Kg
Antimony	20 mg/kg	31 mg/kg	0.078 J mg/Kg	0.085 J mg/Kg	0.10 J mg/Kg	0.10 J mg/Kg	0.12 J mg/Kg	0.17 J mg/Kg
Arsenic	20 mg/kg	0.39 mg/kg	3.9 mg/Kg	3.6 mg/Kg	3.3 mg/Kg	4.0 mg/Kg	2.6 mg/Kg	3.6 mg/Kg
Barium	1000 mg/kg	5400 mg/kg	18 mg/Kg	23 mg/Kg	20 mg/Kg	21 mg/Kg	20 mg/Kg	20 mg/Kg
Beryllium	0.7 mg/kg	150 mg/kg	0.38 mg/Kg	0.30 mg/Kg	0.30 mg/Kg	0.28 mg/Kg	0.21 mg/Kg	0.33 mg/Kg
Cadmium	2 mg/kg	37 mg/kg	0.069 J mg/Kg	0.12 J mg/Kg	0.087 J mg/Kg	0.14 J mg/Kg	0.11 J mg/Kg	0.11 J mg/Kg
Calcium	NA	NA	1400 mg/Kg	1200 mg/Kg	1300 mg/Kg	1300 mg/Kg	1300 mg/Kg	2200 mg/Kg
Chromium	30 mg/kg	210 mg/kg	12 J mg/Kg	12 J mg/Kg	11 J mg/Kg	11 J mg/Kg	9.0 J mg/Kg	9.6 J mg/Kg
Cobalt	NA	900 mg/kg	4.6 mg/Kg	4.1 mg/Kg	4.6 mg/Kg	4.3 mg/Kg	4.1 mg/Kg	4.7 mg/Kg
Copper	NA	3100 mg/kg	11 J mg/Kg	11 J mg/Kg	13 J mg/Kg	13 J mg/Kg	12 J mg/Kg	13 J mg/Kg
Iron	NA	23000 mg/kg	12000 mg/Kg	10000 mg/Kg	9200 mg/Kg	9200 mg/Kg	7900 mg/Kg	12000 mg/Kg
Lead	300 mg/kg	400 mg/kg	9.1 mg/Kg	11 mg/Kg	6.9 mg/Kg	7.6 mg/Kg	3.5 mg/Kg	10 mg/Kg
Magnesium	NA	NA	2800 J mg/Kg	2600 J mg/Kg	2800 J mg/Kg	2600 J mg/Kg	2900 J mg/Kg	3300 J mg/Kg
Manganese	NA	1800 mg/kg	180 mg/Kg	180 mg/Kg	190 mg/Kg	190 mg/Kg	210 mg/Kg	200 mg/Kg
Mercury	20 mg/kg	23 mg/kg	0.055 mg/Kg	0.090 mg/Kg	0.031 J mg/Kg	0.055 mg/Kg	0.022 mg/Kg	0.058 mg/Kg
Nickel	20 mg/kg	1600 mg/kg	8.4 mg/Kg	8.8 mg/Kg	8.4 mg/Kg	8.7 mg/Kg	7.8 mg/Kg	9.1 mg/Kg
Potassium	NA	NA	400 J mg/Kg	560 J mg/Kg	500 J mg/Kg	530 J mg/Kg	520 J mg/Kg	420 J mg/Kg
Selenium	400 mg/kg	390 mg/kg	0.29 mg/Kg	0.18 mg/Kg	0.14 J mg/Kg	0.13 mg/Kg	0.061 J mg/Kg	0.24 mg/Kg
Silver	100 mg/kg	390 mg/kg	0.058 mg/Kg	0.34 mg/Kg	0.092 mg/Kg	0.071 mg/Kg	0.053 mg/Kg	0.083 mg/Kg
Sodium	NA	NA	29 J mg/Kg	31 J mg/Kg	36 J mg/Kg	29 J mg/Kg	40 J mg/Kg	31 J mg/Kg
Thallium	8 mg/kg	5.2 mg/kg	0.069 J mg/Kg	0.073 J mg/Kg	0.057 J mg/Kg	0.052 mg/Kg	0.047 mg/Kg	0.056 mg/Kg
Vanadium	600 mg/kg	78 mg/kg	16 mg/Kg	13 mg/Kg	14 mg/Kg	13 mg/Kg	12 mg/Kg	17 mg/Kg
Zinc	2500 mg/kg	23000 mg/kg	25 mg/Kg	32 mg/Kg	26 mg/Kg	38 mg/Kg	24 mg/Kg	38 mg/Kg

U = Not Detected J = Estimated R = Rejected

Shaded results exceed MCP S-1/GW-1 (2006) criteria.

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STARS / rptDataSummary_TwoCriteria_NS / Reporter / 11.1

Table C-2

Confirmatory Soil Sample Data - Building 13

Removal Action, Building 14 and Former Building 13, US Army SSC, Natick, MA

Sample Location Name Sample Identifier QC Type Date Collected Media Depth	MCP S-1/GW-1 (2006)	Region 9 PRG - Soil (2004)	SS-115 SX115X01 Field Sample 1/22/2007 Soil 1-1.5 ft	SS-117 SX117X01 Field Sample 1/22/2007 Soil 1-1.5 ft				
Metals								
Aluminum	NA	76000 mg/kg	5700 mg/Kg	4400 mg/Kg	-	-	-	-
Antimony	20 mg/kg	31 mg/kg	0.092 J mg/Kg	0.10 J mg/Kg	-	-	-	-
Arsenic	20 mg/kg	0.39 mg/kg	3.7 mg/Kg	2.9 mg/Kg	-	-	-	-
Barium	1000 mg/kg	5400 mg/kg	22 mg/Kg	22 mg/Kg	-	-	-	-
Beryllium	0.7 mg/kg	150 mg/kg	0.25 mg/Kg	0.21 mg/Kg	-	-	-	-
Cadmium	2 mg/kg	37 mg/kg	0.18 J mg/Kg	0.059 mg/Kg	-	-	-	-
Calcium	NA	NA	1400 mg/Kg	990 mg/Kg	-	-	-	-
Chromium	30 mg/kg	210 mg/kg	11 J mg/Kg	6.2 J mg/Kg	-	-	-	-
Cobalt	NA	900 mg/kg	4.2 mg/Kg	3.7 mg/Kg	-	-	-	-
Copper	NA	3100 mg/kg	13 J mg/Kg	11 J mg/Kg	-	-	-	-
Iron	NA	23000 mg/kg	8900 mg/Kg	7800 mg/Kg	-	-	-	-
Lead	300 mg/kg	400 mg/kg	11 mg/Kg	3.4 mg/Kg	-	-	-	-
Magnesium	NA	NA	2400 J mg/Kg	2300 J mg/Kg	-	-	-	-
Manganese	NA	1800 mg/kg	180 mg/Kg	150 mg/Kg	-	-	-	-
Mercury	20 mg/kg	23 mg/kg	0.060 mg/Kg	0.017 mg/Kg	-	-	-	-
Nickel	20 mg/kg	1600 mg/kg	8.0 mg/Kg	6.6 mg/Kg	-	-	-	-
Potassium	NA	NA	550 J mg/Kg	500 J mg/Kg	-	-	-	-
Selenium	400 mg/kg	390 mg/kg	0.13 mg/Kg	0.085 J mg/Kg	-	-	-	-
Silver	100 mg/kg	390 mg/kg	0.078 mg/Kg	0.044 mg/Kg	-	-	-	-
Sodium	NA	NA	29 J mg/Kg	31 J mg/Kg	-	-	-	-
Thallium	8 mg/kg	5.2 mg/kg	0.064 J mg/Kg	0.044 mg/Kg	-	-	-	-
Vanadium	600 mg/kg	78 mg/kg	12 mg/Kg	11 mg/Kg	-	-	-	-
Zinc	2500 mg/kg	23000 mg/kg	40 mg/Kg	24 mg/Kg	-	-	-	-

U = Not Detected J = Estimated R = Rejected

Shaded results exceed MCP S-1/GW-1 (2006) criteria.

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**Summary of Soil Confirmation Sample Analytical Results (HLA, 2001) Compared to Updated Standards
Boiler Plant Site - Soldier Systems Center**

Parameter Depth	Regulatory Standard			Sample ID														
	MCP	MCP	EPA Region 9	5/24/2001						5/29/2001								6/7/2001
	S1/GW-1 2001	S1/GW-1 2008	PRG 2004	N wall 6-8'	WN wall 6-8'	WS wall 6-8'	WS wall D 6-8'	E wall 6-8'	S wall 2-4'	NE bot 10-11'	NW bot 10-11'	cen bot 10-11'	SE bot 10-11'	SW bot 10-11'	L bot 1 0'	L bot 2 0'	L bot 3 0'	NE wall 6-8'
Analysis completed by AMRO																		
EPH (mg/kg)																		
C9-C18 Aliphatic Hydrocarbons	1000	1000	-	57 U	56 U	56 U	57 U	54 U	54 U	62 U	63 U	60 U	58 U	64 U	63 U	55 U	58 U	56 U
C19-C36 Aliphatic Hydrocarbons	2500	3000	-	57 U	56 U	56 U	57 U	54 U	54 U	62 U	63 U	60 U	58 U	64 U	63 U	55 U	58 U	87
C11-C22 Aromatic Hydrocarbons	200	1000	-	57 U	56 U	56 U	57 U	54 U	54 U	62 U	63 U	60 U	58 U	64 U	63 U	55 U	58 U	56 U
VPH (mg/kg)																		
C5-C8 Aliphatic Hydrocarbons	100	100	-	2.1 U	3.0 U	2.2 U	2.0 U	2.7 U	2.2 U	3.4 U	3.6 U	3.7 U	2.3 U	4.2 U	2.8 U	1.9 U	2.6 U	0.31 U
C9-C12 Aliphatic Hydrocarbons	1000	1000	-	0.52 U	0.75 U	0.54 U	0.49 U	0.68 U	0.56 U	0.85 U	0.91 U	0.94 U	0.58 U	1.1 U	0.71 U	0.47 U	0.65 U	0.88
C9-C10 Aromatic Hydrocarbons	100	100	-	0.52 U	0.75 U	0.54 U	0.49 U	0.68 U	0.56 U	0.85 U	0.91 U	0.94 U	0.58 U	1.1 U	0.71 U	0.47 U	0.65 U	0.77 U
Methyl-tert-butyl ether	0.3	0.1	32	0.042 U	0.060 U	0.043 U	0.039 U	0.054 U	0.045 U	0.068 U	0.072 U	0.075 U	0.046 U	0.064 U	0.056 U	0.037 U	0.052 U	0.062 U
Benzene	10	2	0.64	0.042 U	0.060 U	0.043 U	0.039 U	0.054 U	0.045 U	0.068 U	0.072 U	0.075 U	0.046 U	0.064 U	0.056 U	0.037 U	0.052 U	0.062 U
Toluene	90	30	520	0.042 U	0.060 U	0.043 U	0.039 U	0.054 U	0.045 U	0.068 U	0.072 U	0.075 U	0.046 U	0.064 U	0.056 U	0.037 U	0.052 U	0.062 U
Ethylbenzene	80	40	400	0.042 U	0.060 U	0.043 U	0.039 U	0.054 U	0.045 U	0.068 U	0.072 U	0.075 U	0.046 U	0.064 U	0.056 U	0.037 U	0.052 U	0.062 U
Total Xylenes	500	400	270	0.042 U	0.060 U	0.043 U	0.039 U	0.054 U	0.045 U	0.072 U	0.072 U	0.075 U	0.046 U	0.064 U	0.056 U	0.037 U	0.052 U	0.062 U
Naphthalene	4	4	56	0.10 U	0.15 U	0.11 U	0.098 U	0.14 U	0.11 U	0.17 U	0.18 U	0.19 U	0.12 U	0.21 U	0.14 U	0.093 U	0.013 U	0.15 U
SVOCs (mg/kg)																		
Acenaphthylene	100	1	-	0.29 U	0.29 U	0.29 U	0.28 U	0.27 U	0.1 U	0.31 U	0.31 U	0.30 U	0.29 U	0.32 U	0.31 U	0.27 U	0.29 U	0.28 U
Phenanthrene	700	10	-	0.29 U	0.29 U	0.29 U	0.28 U	0.27 U	0.48	0.31 U	0.31 U	0.30 U	0.29 U	0.32 U	0.10 J	0.086 J	0.29 U	0.220 J
Anthracene	1000	1000	22000	0.29 U	0.29 U	0.29 U	0.28 U	0.27 U	0.088 U	0.31 U	0.31 U	0.30 U	0.29 U	0.32 U	0.31 U	0.27 U	0.29 U	0.28 U
Fluoranthene	1000	1000	2300	0.093 J	0.29 U	0.29 U	0.28 U	0.27 U	0.42	0.31 U	0.31 U	0.30 U	0.29 U	0.32 U	0.60	0.52	0.29 U	0.490
Pyrene	700	1000	2300	0.076 J	0.29 U	0.29 U	0.28 U	0.27 U	0.610	0.31 U	0.31 U	0.30 U	0.29 U	0.32 U	0.52	0.46	0.29 U	0.560
Benzo(a)anthracene	0.7	7	0.62	0.29 U	0.29 U	0.29 U	0.28 U	0.27 U	0.26 J	0.31 U	0.31 U	0.30 U	0.29 U	0.32 U	0.34	0.31	0.29 U	0.300
Chrysene	7	70	62	0.66 J	0.29 U	0.29 U	0.28 U	0.27 U	0.28	0.31 U	0.31 U	0.30 U	0.29 U	0.32 U	0.46	0.39	0.29 U	0.440
Benzo(b)fluoranthene	0.7	7	0.62	0.081 J	0.29 U	0.29 U	0.28 U	0.27 U	0.23 J	0.31 U	0.31 U	0.30 U	0.29 U	0.32 U	0.65	0.57	0.29 U	0.390
Benzo(k)fluoranthene	7	70	6.2	0.29 U	0.29 U	0.29 U	0.28 U	0.27 U	0.091 J	0.31 U	0.31 U	0.30 U	0.29 U	0.32 U	0.27 J	0.26 J	0.29 U	0.120 J
Benzo(a)pyrene	0.7	2	0.062	0.29 U	0.29 U	0.29 U	0.28 U	0.27 U	0.21 J	0.31 U	0.31 U	0.30 U	0.29 U	0.32 U	0.46	0.41	0.29 U	0.310
Indeno(1,2,3-cd)pyrene	0.7	7	0.62	0.29 U	0.29 U	0.29 U	0.28 U	0.27 U	0.12 J	0.31 U	0.31 U	0.30 U	0.29 U	0.32 U	0.41	0.36	0.29 U	0.220 J
Dibenzo(a,h)anthracene	0.7	0.7	0.062	0.29 U	0.29 U	0.29 U	0.28 U	0.27 U	0.28 U	0.31 U	0.31 U	0.30 U	0.29 U	0.32 U	0.095 J	0.085 J	0.29 U	0.064 J
Benzo(g,h,i)perylene	1000	1000	-	0.29 U	0.29 U	0.29 U	0.28 U	0.27 U	0.13 J	0.31 U	0.31 U	0.30 U	0.29 U	0.32 U	0.37	0.31	0.29 U	0.170 J
Bis(2-ethylhexyl)phthalate	100	200	35	0.29 U	0.29 U	0.29 U	0.28 U	0.27 U	0.28 U	0.31 U	0.31 U	0.30 U	0.29 U	0.32 U	0.31 U	0.27 U	0.29 U	0.150 J
All other SVOCs	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
PCBs (mg/kg)																		
Aroclor 1260	2^	2^	0.22^	0.440	0.028 U	0.028 U	0.028 U	0.027 U	0.690	0.022 J	0.13	0.024 J	0.029 U	0.023 J	0.031 U	0.05	0.029 U	0.56
All other Aroclors	-	2^	0.22^	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Metals (mg/kg)																		
Lead	300	300	400	11	3.6 U	3.6 U	3.5 U	11	32	5.8	4.8	2.9 J	4.0	3.1 J	5.5	12	8.9	25

Bold=detected concentration

^Standard for "Polychlorinated Biphenyls (PCBs)"

*Standard for "PCBs (unspeciated mixture, high risk, e.g., Aroclor 1254)"

**Standard for "PCBs (unspeciated mixture, low risk, e.g., Aroclor 1016)"

**Summary of Soil Confirmation Sample Analytical Results (HLA, 2001) Compared to Updated Standards
Boiler Plant Site - Soldier Systems Center**

Parameter Depth	Regulatory Standard			Sample ID														
	MCP	MCP	EPA Region 9	5/24/2001						5/29/2001								6/7/2001
	S1/GW-1 2001	S1/GW-1 2008	PRG 2004	N wall 6-8'	WN wall 6-8'	WS wall 6-8'	WS wall D 6-8'	E wall 6-8'	S wall 2-4'	NE bot 10-11'	NW bot 10-11'	cen bot 10-11'	SE bot 10-11'	SW bot 10-11'	L bot 1 0'	L bot 2 0'	L bot 3 0'	NE wall 6-8'
Analysis completed by CEIMIC																		
SVOCs (mg/kg)																		
Acenaphthylene	100	1	-	0.20 U	0.21 U	0.20 U	0.19 U	0.19 U	0.20 U	0.22 U	0.21 U	0.21 U	0.20 U	0.22 U	0.22 U	0.27 U	0.20 U	0.96 U
Phenanthrene	700	10	-	0.048 J	0.21 U	0.20 U	0.19 U	0.09 J	0.21	0.22 U	0.21 U	0.21 U	0.044 J	0.22 U	0.22 U	0.27 U	0.20 U	0.39 J
Anthracene	1000	1000	22000	0.20 U	0.21 U	0.20 U	0.19 U	0.19 U	0.20 U	0.22 U	0.21 U	0.21 U	0.20 U	0.22 U	0.22 U	0.27 U	0.20 U	0.96 U
Fluoranthene	1000	1000	2300	0.13 J	0.21 U	0.20 U	0.19 U	0.15 J	0.37	0.22 U	0.049 J	0.21 U	0.058 J	0.22 U	0.22 U	0.46 J	0.062 J	0.87 J
Pyrene	700	1000	2300	0.12 J	0.21 U	0.20 U	0.19 U	0.18 J	0.37	0.22 U	0.045 J	0.21 U	0.048 J	0.22 U	0.22 U	0.43 J	0.083 J	1.5
Benzoic Acid	-	-	100000	0.12 J	0.40 U	0.38 U	0.37 U	0.084 J	0.38 U	0.43 U	0.41 U	0.40 U	0.39 U	0.42 U	0.42 U	1.8 U	0.39 U	1.9 U
Benzo(a)anthracene	0.7	7	0.62	0.07 J	0.21 U	0.20 U	0.19 U	0.086 J	0.180 J	0.22 U	0.21 U	0.21 U	0.20 U	0.22 U	0.22 U	0.23 J	0.20 U	0.71 J
Chrysene	7	70	62	0.091 J	0.21 U	0.20 U	0.19 U	0.12 J	0.23	0.22 U	0.21 U	0.21 U	0.20 U	0.22 U	0.22 U	0.35 J	0.20 U	1.3
Dibenzo(a,h)anthracene	0.7	0.7	0.062	0.20 U	0.21 U	0.20 U	0.19 U	0.19 U	0.042 J	0.22 U	0.21 U	0.21 U	0.20 U	0.22 U	0.22 U	0.92 U	0.20 U	0.96 U
Benzo(b)fluoranthene	0.7	7	0.62	0.095 J	0.21 U	0.20 U	0.19 U	0.071 J	0.190 J	0.22 U	0.21 U	0.21 U	0.20 U	0.22 U	0.22 U	0.26 J	0.20 U	0.61 J
Benzo(k)fluoranthene	7	70	6.2	0.066 J	0.21 U	0.20 U	0.19 U	0.079 J	0.170 J	0.22 U	0.21 U	0.21 U	0.20 U	0.22 U	0.22 U	0.48 J	0.20 U	0.43 J
Benzo(a)pyrene	0.7	2	0.062	0.071 J	0.21 U	0.20 U	0.19 U	0.084 J	0.170 J	0.22 U	0.21 U	0.21 U	0.20 U	0.22 U	0.22 U	0.35 J	0.20 U	0.58 J
Indeno(1,2,3-cd)pyrene	0.7	7	0.62	0.061 J	0.21 U	0.20 U	0.19 U	0.052 J	0.130 J	0.22 U	0.21 U	0.21 U	0.20 U	0.22 U	0.22 U	0.27 J	0.20 U	0.23 J
Benzo(g,h,i)perylene	1000	1000	-	0.064 J	0.21 U	0.20 U	0.19 U	0.051 J	0.120 J	0.22 U	0.21 U	0.21 U	0.20 U	0.22 U	0.22 U	0.92 U	0.20 U	0.25 J
Bis(2-ethylhexyl)phthalate	100	200	35	0.054 JB	0.062 JB	0.049 JB	0.098 JB	0.05 JB	0.061 JB	0.59 B	0.10 JB	0.29 B	0.046 J	0.061 JB	0.16 JB	0.92 U	0.059 JB	0.96 U
All other SVOCs	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
PCBs (mg/kg)																		
Aroclor 1016	2^	2^	3.9**	0.039 U	0.040 U	0.038 U	0.037 U	0.037 U	0.380 U	0.043 U	0.041 U	0.041 U *	0.039 U	0.043 U	0.042 U	0.036 U	0.039 U	0.37 U
Aroclor 1260	2^	2^	0.22*	0.34	0.040 U	0.038 U	0.037 U	0.037 U	1.8	0.046	0.22	0.028 J *	0.039 U	0.023 J	0.042 U	0.063	0.039 U	0.77
All other Aroclors	-	2^	0.22*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Metals (mg/kg)																		
Lead	300	300	400	8.2	3.3	3.0	3.4	9.2	21.9	3.9	5.7	3.5	10.9	3.9	6.3	14.5	10.1	29.4

Bold=detected concentration

^Standard for "Polychlorinated Biphenyls (PCBs)"

*Standard for "PCBs (unspeciated mixture, high risk, e.g., Aroclor 1254)"

**Standard for "PCBs (unspeciated mixture, low risk, e.g., Aroclor 1016)"

APPENDIX D
PUBLIC HEARING TRANSCRIPT

PUBLIC HEARING

RE: PROPOSED CLEANUP PLAN FOR SOIL
T-25 AREA
BUILDING 14
FORMER BUILDING 13
BOILER PLANT
at the
U.S. ARMY SOLDIER SYSTEMS CENTER
NATICK, MASSACHUSETTS

THURSDAY, APRIL 17, 2008

8:00 P.M.

FREDERICK CONLEY PUBLIC SAFETY TRAINING CENTER
20 EAST CENTRAL STREET
NATICK, MASSACHUSETTS

JOHN McHUGH, USA SSC
HEARING OFFICER

A P P E A R A N C E S:

KEVIN PALAIA
ICF INTERNATIONAL
33 HAYDEN AVENUE
LEXINGTON, MASSACHUSETTS 02421

ORIGINAL

P R O C E E D I N G S

MR. McHUGH: Good evening. We're going to start the formal portion of the public hearing right now.

Anyone who speaks should please state their name and their address, all the comments will be responded back to that address. All the comments that are given to us will be addressed to the regulatory authorities, too.

That's pretty much all I have to say right now. Does anybody need to or is ready to speak or make a comment to the proposed plan?

MR. KALTOFEN: My name is Marco Kaltofen and I reside at 5 Water Street in Natick. I'd like to take the opportunity to thank the Army and their contractors for the good work that they did in resolving the soil issue. I certainly agree with the no further action decision of the soils.

You all actually know me here. You know I reserve judgement and I'm not saying that about our ground water and sediment issues. I look forward to the additional work that will get done in those areas in the future. Thank

1 you.

2 MR. McHUGH: Any other comments? No,
3 okay.

4 (Discussion held off the record.)

5 MR. McHUGH: The time now is 9:00 P.M.
6 and I declare that this public hearing is now
7 closed.

8 (The hearing then ended at 9:00 P.M.)
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CERTIFICATION

I, DENISE O'LEARY, hereby certify the
foregoing to be a true and complete transcript
of the oral evidence presented at the subject
hearing.


REGISTERED PROFESSIONAL REPORTER

DATED: April 17, 2008

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