



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

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August 15, 2019

Robert J. Simeone
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Devens Army Base Realignment and Closure Division
30 Quebec Street, Box 100
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Re: Addendum to the 2015 Five-Year Review Report
Devens Consolidated Landfill Contributor Sites AOC 9, 40 and SA 13
Former Fort Devens Army Installation Devens, Massachusetts

Dear Mr. Simeone:

The U.S. Environmental Protection Agency (EPA) has completed its review of the *"2015 Five-Year Review Addendum, Devens Consolidated Landfill Contributor Sites AOC 9, 40 and SA 13, Former Fort Devens Army Installation Devens, Massachusetts"* ("the Addendum") dated June 2019 and supports the finding of "Short-Term Protective" for the Devens Consolidation Landfill (DCL) Contributor Sites (the "DCL sites") remedy. The Addendum was prepared to address three DCL Contributor Sites inadvertently excluded from the DCL evaluation in the 2015 Devens Five-Year Review Report. While enforcement and monitoring of institutional controls required by the July 1999 Record of Decision (ROD) remain effective in providing ongoing, short-term protection of human health and the environment, additional work must be performed to assess the remedy's ability to provide protection in the long-term.

As discussed in numerous EPA comment letters, several components of the five-year review process, as specified in EPA's June 2001 "Comprehensive Five-Year Review Guidance" - OSWER 9355.7-03B-P ("the FYR Guidance"), were inadequately addressed in the draft Addendum. Specifically, the five-year review must answer Question B, "Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid," in order to properly evaluate whether changes in standards and assumptions used at the time of remedy selection affect the validity of RAOs and the protectiveness of the remedy.

Although EPA did not identify issues affecting *current* protectiveness of the July 1999 remedy for the Devens Consolidated Landfill Contributor Sites AOC 9, 40 and SA 13, EPA cannot conclude that the July 1999 remedy is protective in the *long-term* until Army completes the evaluation discussed above, specifically including an assessment of changes to Applicable or Relevant and Appropriate Requirements (ARARs). Army has agreed to build upon the preliminary work conducted as part of the 2015 five-year review (and this

addendum) and complete the required evaluation and ARARs assessment as part of the next (2020) Devens five-year review in accordance with CERCLA, the NCP and EPA's FYR Guidance.

In the interim, EPA will continue to monitor the other remedies evaluated in the 2015 Devens FYR Report and oversee Army's performance of a base-wide CERCLA investigation of per- and polyfluoroalkyl substances (PFAS) at the following Areas of Contamination (AOCs) and geographic areas of interest:

- AOC 05
- AOC 20
- AOC 21
- AOC 30
- AOC 31
- AOC 32/43A
- AOC 43G
- AOC 43J
- AOC 50
- AOC 57
- AOC 69W
- AOC 74
- AOC 75
- AOC 76
- Grove Pond Municipal Well Field
- Grove Pond Investigation Area
- Devens - MacPherson, Patton and Shaboken Water Supply Wells
- Devens WWTP – Infiltration Beds and Sludge Drying Beds
- Area 1 Surface Water and Sediments
- Area 2 Surface Water and Sediments
- Area 3 Surface Water and Sediments

The fourth, 2015 Devens five-year review was triggered by the first remedial action in September 2000. Consistent with Section 121(c) of CERCLA and EPA's August 1, 2011 memo, Program Priorities for Federal Facility Five-Year Review, the next statutory, required five-year review for the former Fort Devens must be finalized by September 29, 2020.

Sincerely,



Bryan Olson, Director
Superfund and Emergency Management Division

cc. Andy Van Dyke, Army
Jessica Strunkin, MassDevelopment
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2015 FIVE YEAR REVIEW ADDENDUM

Devens Consolidated Landfill Contributor Sites

AOC 9, 40 and SA 13

Former Fort Devens Army Installation

Devens, Massachusetts

Contract No.: W912WJ-15-C-0002

Prepared for:



**Army Base Realignment and Closure Division
US Army Garrison Fort Devens**



**US Army Corps of Engineers
New England District
Concord, Massachusetts**

June 2019

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2015 FIVE YEAR REVIEW ADDENDUM
Devens Consolidated Landfill Contributor Sites
AOC 9, 40 and SA 13
Former Fort Devens Army Installation
Devens, Massachusetts

Prepared for:

**ARMY BASE REALIGNMENT AND CLOSURE DIVISION
US ARMY GARRISON FORT DEVENS**

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6/26/2019

Date

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LIST OF ABBREVIATIONS AND ACRONYMS

AOC	Area of Contamination
ARAR	Applicable, Relevant, and Appropriate Requirement
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Restoration, Compensation, and Liability Act
cy	cubic yard
DCL	Devens Consolidated Landfill
DDD	dichlorodiphenyldichloroethane
FS	Feasibility Study
ft	Feet
IC	Institutional Control
LTM	Long-Term Monitoring
MassDEP	Massachusetts Department of Environmental Protection
MCP	Massachusetts Contingency Plan
mg/Kg	milligrams per kilogram
NPL	National Priorities List
µg/L	micrograms per liter
O&M	operation & maintenance
PAH	polycyclic aromatic hydrocarbons
PRG	preliminary remediation goals
RI	remedial investigation
ROD	record of decision
SA	study area
SI	site inspection
SPIA	South Post Impact Area
SVOC	semi-volatile organic compounds
USEPA	U.S. Environmental Protection Agency
UU/UE	unlimited use/unrestricted exposure
TPH	total petroleum hydrocarbons
VOC	volatile organic compound

EXECUTIVE SUMMARY

KOMAN Government Solutions, LLC, has prepared this addendum to the *2015 Five-Year Review Report, for Former Fort Devens Army Installation, Base Realignment and Closure (BRAC) Legacy Sites, Devens, Massachusetts* [H&S Environmental, Inc. (H&S), 2015] to address three contributor sites to Devens Consolidation Landfill (DCL): Area of Contamination (AOC) 9, AOC 40, and Study Area (SA) 13. This Addendum was completed in accordance with the U.S. Environmental Protection Agency (USEPA) Comprehensive Five-Year Review Guidance, dated June 2001.

DCL and Contributor Sites: In addition to the Consolidation Landfill, the DCL includes the seven contributor sites that were former landfills and debris disposal areas and a former housing area at the former Fort Devens. The seven DCL contributor sites include:

- SA 12: A half-acre location where construction debris and yard waste were deposited [approximately 8,700 cubic yards (cy)];
- SA 13: A one-acre area used from 1965 to the mid-1990s for yard-waste (approximately 10,000 cy);
- AOC 9: An area used for storing wood, concrete, asphalt, metal, brick, glass, and tree stumps (approximately 121,000 cy);
- AOC 11: A former landfill used from 1975 to 1980 for disposal of wood-frame hospital demolition debris (approximately 35,000 cy);
- AOC 40: Four acres used for construction debris, ash, stumps, and logs (approximately 125,400 cy);
- AOC 41: A one quarter-acre landfill in the South Post Impact Area (SPIA) that was used up to the 1950s for disposal of non-explosive material and household debris (approximately 1,500 cy); and
- Housing areas Grant, Locust, and Cavite: Soils contaminated with volatile organics or pesticides and walling material contaminated with volatiles or pesticides (approximately 2,290 tons of soil and approximately 1,240 tons of concrete).

This Addendum is focused on three of the seven contributor sites: SA 13, AOC 9 and AOC 40. AOC 41 is inclusive of the SPIA and is discussed in the SPIA portion of the five-year review. As per the record of decision (ROD), the remediation of contributor sites AOC 41 and SA 12 were considered non-Comprehensive Environmental Restoration, Compensation, and Liability Act (CERCLA) actions and are not subject to five-year site review requirements. In 2005, the Army provided clarification to the USEPA indicating that AOC 11 was remediated to allow for unrestricted use. Based on the clarifications to the USEPA, Institutional Controls (IC) and five-year site reviews were no longer needed for AOC 11.

The USEPA approved the ROD for landfill remediation of the first six areas in July 1999. The selected remedies included provisions for either on-site or off-site disposal options. The approved remedial alternative documented in the 1999 ROD called for limited removal at SA 12 and AOC 41 and full excavation of AOCs 9, 11, 40 and SA 13. The on-site landfill construction alternative was selected as the preferred alternative. Construction of the DCL commenced in September 2000 and was completed in November 2002. The remedial action closure reports for the contributor sites and for the landfill [Shaw Environmental, Inc. (Shaw), 2003a and b], were accepted by USEPA and Massachusetts Department of Environmental Protection (MassDEP), certifying that the DCL was constructed and capped in accordance with the ROD, and met the performance standards and/or remedial response objectives in the ROD. The remedy in place at the DCL is functioning as intended and continues to be protective of human health and the environment.

Construction activities at the associated contributor sites (AOC 9, AOC 40, and SA 13) are complete. Contributor sites AOC 9, AOC 40, and SA 13 were transferred from the Army to MassDevelopment in

March 2006. Institution controls were incorporated into the quitclaim deed for parcels A2A (AOC 9), A8 (SA 13), and A4 (AOC 40) to prevent residential development of the properties. Due to the ICs placed in the quitclaim deed, these three contributor sites were then subject to five-year site reviews.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Former Fort Devens Army Installation		
EPA ID: MA7210025154		
Region: Region 1	State: MA	City/County: Devens/Middlesex & Worcester
SITE STATUS		
NPL Status: Final		
Multiple OUs? Yes	Has the site achieved construction completion? No	
REVIEW STATUS		
Lead agency: Other Federal Agency If "Other Federal Agency" was selected above, enter Agency name: US Army Base Realignment and Closure (BRAC) Environmental Office, Devens, MA		
Author name (Federal or State Project Manager): Not Applicable		
Author affiliation: Not Applicable		
Review period: January 2015 – June 2015		
Date of site inspection: August 19, 2016 (occurred after review period due to misunderstanding of requirement to include the Devens Consolidation Landfill (DCL) Contributor sites (AOC 9, AOC 40, and SA 13) in the 2015 Devens five-year review.		
Type of review: Statutory		
Review number: 4		
Triggering action date: September 26, 1995		
Due date (five years after triggering action date): September 26, 2000 (and every five years thereafter)		

Issues:

While no issues affecting short-term protectiveness of the remedy selected for three DCL Contributor Sites AOC9, AOC40, and SA13 were identified in this (2015) Devens Five-Year Review Addendum, the ARARs assessment is not yet complete. An analysis of each of the ARARs and TBCs (i.e., exposure assumptions, toxicity data, cleanup levels and remedial action objectives) included in the 1999 ROD must be conducted in the next (2020) Devens five-year review to ensure protectiveness of the remedy in the long-term.

Recommendations and Follow-up Actions:

Although this (2015) Devens Five-Year Review Addendum did not identify issues affecting current protectiveness of the remedy for the DCL Contributor Sites, Army must complete its ARARs assessment to ensure protectiveness in the long-term. Specifically, Army has agreed to assess each of the ARARs and TBCs (i.e., exposure assumptions, toxicity data, cleanup levels and remedial action objectives) included in the 1999 ROD as part of the next (2020) Devens five-year review to confirm that post-ROD

changes to these standards and TBCs, if any, would/do not affect the protectiveness determination for the remedy(s) selected for the DCL and the DCL Contributor Sites.

In addition, Army may prepare an updated baseline risk assessment for regulatory review and concurrence to evaluate attainment of unlimited use/unrestricted exposure (UU/UE) cleanup goals and support removal of ICs prohibiting residential use of these properties.

Finally, in accordance with amended floodplain management and wetland protection regulations (44 C.F.R. 9, Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Protection of Wetlands)), Army will ensure protection of wastes left in place within a floodplain by monitoring, managing and repairing, if necessary, rip-rap and/or soil covers up to the 500-year flood elevation. The amended floodplain regulations (*see* Appendix D-2) will also be discussed and more thorough evaluated as part of the next (2020) Devens five-year review.

Protectiveness Statement(s):

There are no LTM or O&M requirements in place for the DCL contributor sites, AOC 9, AOC 40, and SA13. Per requirements set forth in the 1999 ROD, 2006 transfer deed and the Devens Reuse Plan, annual site inspections of the DCL contributor sites confirmed that these areas are not currently used, or under consideration for being used, for residential purposes.

The remedy at the DCL contributor sites is Short-Term Protective. The remedy currently protects human health and the environment because institutional controls are enforced, and no exposures are occurring or imminent. However, for the remedy to be protective in the long-term, Army must complete its ARARs assessment in the next (2020) Devens five-year review in accordance with CERCLA, the NCP and EPA's five-year review guidance to ensure protectiveness. Army has agreed to build upon the preliminary work conducted as part of this (2015) Devens Five-Year Review Addendum and complete its ARARs assessment in the next (2020) Devens five-year review.

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1.0 INTRODUCTION

KOMAN Government Solutions, LLC, has prepared this Addendum to the 2015 Five-Year Review Report, for Former Fort Devens Army Installation, Base Realignment and Closure (BRAC) Legacy Sites, Devens, Massachusetts (H&S, 2015) to address three Devens Consolidation Landfill (DCL) contributor sites that have Institutional Controls (IC) in place: Area of Contamination (AOC) 9, AOC 40, and Study Area (SA) 13. This Addendum is required because hazardous substances, pollutants or contaminants remain at these sites above levels that allow for unlimited use and unrestricted exposure (UU/UE) but were inadvertently excluded from the DCL evaluation in the 2015 Devens Five-Year Review Report (H&S, 2015).

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2.0 SITE CHRONOLOGY

The site chronology presented in Table 1 includes the dates of major events at the DCL contributor sites.

Table 1
Chronology of Events DCL Contributor Sites

Event	Date
Fort Devens Final National Priorities List (NPL) listing	November 1989
Fort Devens/U.S. Environmental Protection Agency (USEPA) signed a Federal Facilities Agreement (FFA) establishing a timetable for implementing clean-up activities	November 1991
Enhanced Preliminary Assessment	1992
Landfill Consolidation Feasibility Study (FS) Report	September 1995
Contributor Sites (SA 6, SA 12, SA 13, AOC 9, AOC 11, AOC 40, and AOC 41) Site Inspections/Remedial Investigations	1994-1996
Landfill Remediation FS Report	January 1997
Off-site disposal evaluated	Spring/Summer 1998
Landfill Remediation FS Addendum Report	November 1998
Second Proposed Plan issued describing the Army's Alternative 4C as the preferred option	December 1998
Record of Decision (ROD) signed	July 1999
First Five-Year Statutory Review	September 2000
Commenced Landfill Construction	September 25, 2000
Mobilized at AOCs 11 and 40, and SAs 12 and 13	October 2000
Mobilized at AOC 9	January 2001
Easement Agreement Tract No. 400E between MassDevelopment and Army)	June 2001
Work completed at AOCs 11 and SA 13	May 2002
Landfill cap construction completed; work completed at AOC 40	November 2002
Work completed at AOC 9	December 2002
Operation and Maintenance (O&M) activities at landfill and remedial sites begins	July/August 2003
Remedial action complete. Closure Report	October 2003
Second Five-Year Statutory Review for the Former Fort Devens	September 2005
AOC 9, AOC 40, and SA 13 transferred to MassDevelopment via Quitclaim Deed	March 2006
Third Five-Year Review for the Former Fort Devens	September 2010
Fourth Five-Year Review for the Former Fort Devens	September 2015

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3.0 BACKGROUND

3.1 Physical Characteristics

Seven contributor sites were considered for consolidation in the DCL (Attachment A, Figure 1) these sites consisted of two SAs, four AOCs, and one pesticide removal project at three Fort Devens housing areas. The DCL (Attachment A, Figure 2) is discussed in detail in Section 3 the 2015 Devens Five-Year Review Report (H&S, 2015). This Addendum is focused on three of the seven contributor sites: SA 13, AOC 9 and AOC 40.

Descriptions of the seven contributor sites are presented below:

- SA 12: A half-acre location where construction debris and yard waste were deposited [approximately 8,700 cubic yards (cy)];
- SA 13: A one-acre area used from 1965 to the mid-1990s for yard-waste (approximately 10,000 cy);
- AOC 9: An area used for storing wood, concrete, asphalt, metal, brick, glass, and tree stumps (approximately 121,000 cy);
- AOC 11: A former landfill used from 1975 to 1980 for disposal of wood-frame hospital demolition debris (approximately 35,000 cy);
- AOC 40: Four acres used for construction debris, ash, stumps, and logs (approximately 125,400 cy);
- AOC 41: A one quarter-acre landfill in the South Post Impact Area (SPIA) that was used up to the 1950s for disposal of non-explosive material and household debris (approximately 1,500 cy); and
- Housing areas Grant, Locust, and Cavite: Soils and walling materials contaminated with volatile organic compounds (VOC) or pesticides (approximately 2,290 tons of soil and 1,240 tons of concrete).

Section 3.3 provides a summary of the DCL contributor sites that were transferred from Army control to the MassDevelopment for redevelopment and retain deed-recorded restrictions precluding the property to be used for residential purposes. These sites include AOC 9, 40, and SA 13, which are the subject of this Addendum. AOC 41 is inclusive of the SPIA and is discussed in the SPIA portion of the 2015 Devens Five-Year Review Report. As per the record of decision (ROD), the remediation of contributor sites AOC 41 and SA 12 were considered non- Comprehensive Environmental Restoration, Compensation, and Liability Act (CERCLA) actions and are not subject to five-year site review requirements. In 2005, the Army provided clarification to the USEPA indicating that AOC 11 was remediated to allow for unrestricted use. Based on the clarifications to the USEPA, Institutional Controls (IC) and five-year site reviews were no longer needed for AOC 11.

The USEPA approved the ROD for landfill remediation of the first six areas in July 1999. It included provisions for either on-site or off-site disposal options. The on-site landfill construction alternative was selected as the best option. Construction of the DCL commenced in September 2000 and was completed in November 2002. The remedial action closure reports for the contributor sites and the landfill (Shaw, 2003a and b) were accepted, certifying that the DCL was constructed and capped in accordance with the ROD, and met the performance standards and/or response objectives in the ROD. Long-term monitoring (LTM) activities have been performed at the DCL since the completion of the landfill construction.

MassDevelopment maintains ownership of the DCL property and agreed to grant the Army a permanent easement to build and operate the landfill (Easement Agreement Track No. 400E, June 2001). The easement additionally details the Institutional Controls (IC) between the Army and MassDevelopment for the DCL. The 1999 ROD had indicated ICs “were planned for the proposed Consolidation Landfill”. DCL ICs have been evaluated through annual IC inspections, which are conducted per the Land-Use Control

Implementation and Monitoring Plan included in the Long-Term Monitoring and Maintenance Plan [Sovereign/HydroGeoLogic, Inc. (HGL), 2015].

3.2 Land and Resource Use

Devens zoning at AOC 9 indicates Environmental Business zone. AOC 9 is currently undeveloped. AOC 40, a reconstructed wetland unsuitable for redevelopment, is in Open Space/Recreational areas. SA 13 is within the Innovation & Technology Business zone. The location is a shrub swamp and development of this area is not likely. AOC 9, AOC 40, and SA 13 currently remain undeveloped and are either in the Environmental Business zone, Innovation & Technology Business zone, or in Open Space/Recreational area.

3.3 History of Contamination

The following sections provide a summary of three of the seven DCL contributor sites, AOC 9, AOC 40, and SA 13, which are the subject of this Addendum. These sites were transferred from Army control to MassDevelopment for redevelopment and retain deed-recorded restrictions prohibiting the property to be used for residential purposes.

AOC 9

AOC 9 was located on the former North Post, north of Walker Road and west of the wastewater treatment plant. The landfill was operated from the late 1950s until 1978 and was used by the Army, National Guard, site contractors, and off-post personnel. Landfill materials at AOC 9 were generally demolition debris, including wood, concrete, asphalt, metal, brick, glass, and tree stumps. Debris volume was estimated to be 112,000 cy.

A geophysical survey was performed during the 1996 Site Investigation (SI) to supplement information derived from evaluation of aerial photographs and to delineate the actual limits of the landfill. The results of the survey assisted in the placement of test pits and groundwater monitoring wells and provided insight into the distribution of landfill debris. Results of the geophysical survey indicated that the landfill encompassed 5 acres with a larger northern pod containing the majority of landfill material and four smaller southern pods adjacent to the wetlands containing mostly near-surface debris.

The results of the 1996 SI [ABB Environmental Services, Inc. (ABB), 1996] at AOC 9 are summarized below.

Surface Water Contamination

During the 1996 SI (ABB, 1996) at AOC 9, surface water samples were collected from the Nashua River and the wetland area south of the debris landfill. Concentrations of some inorganics, including aluminum, iron, and lead were measured above ecological benchmark concentrations. The SI report suggested that detected inorganic concentrations in the river were generally representative of Nashua River water quality in the area. The SI report concluded that contaminant effects on surface water from AOC 9 debris were not likely significant.

Sediment Contamination

Relatively low concentrations of total petroleum hydrocarbons (TPH) and some inorganics were present in sediment samples collected from the wetland area south of the debris landfill. Relatively low concentrations of VOCs and semivolatile organic compounds (SVOC) were measured in sediment samples collected from the Nashua River. Concentrations of inorganics in Nashua River sediment samples were relatively consistent upstream and downstream of AOC 9 and likely represent typical Nashua River sediment quality in the area. The SI report concluded that contaminant effects on sediment from AOC 9 debris were likely typical of other contaminated reaches along the Nashua River.

Surface Soil Contamination

Organic compounds were not detected in surface soil samples collected at AOC 9. The inorganics copper, lead, and nickel were detected at a concentration above Devens background, but below USEPA Region III residential standards.

Subsurface Soil Contamination

During the 1996 SI soil samples were collected from four test pits excavated within the landfill limits. A total of eight soil samples were collected. Analytical results indicate the presence of polycyclic aromatic hydrocarbons (PAH) in soil, most likely attributed to the presence of ash and burnt wood debris. Total petroleum hydrocarbon levels were detected in all but one test pit located just outside the southern limit of mapped landfill materials. The 1996 SI determined a rough correlation existed between SVOC and TPH concentrations. The elevated concentrations of organic compounds detected in soil samples collected from the landfill test pits are likely derived from the ash and charred wood observed during sampling. The absence of volatile petroleum compounds in soil supports this contention.

Inorganic analytes including barium, calcium, chromium, copper, lead, nickel, potassium, silver, sodium and zinc, were detected above the calculated background concentrations for Fort Devens soils. The 1996 SI determined a rough correlation is evident between elevated concentrations of organic and inorganic analytes in test pits soils.

Groundwater Contamination

Two rounds of groundwater samples were collected from monitoring wells at the site during the SI. Chloroform was detected in AOC 9 groundwater. Chloroform was detected in one of ten samples collected during Round 1. The chloroform concentration was below Massachusetts drinking water standard. Several organics were detected in upgradient, downgradient, and cross-gradient wells. Eight of the 18 inorganics detected in unfiltered Round 1 samples exceeded their respective drinking water standard or guideline.

Inorganics were detected above background concentrations in nearly all groundwater samples collected from AOC 9 groundwater monitoring wells. The eight inorganics were aluminum, arsenic, chromium, cobalt, iron, lead, manganese, and nickel. Filtered samples collected during Round 2 showed reductions in concentrations of these inorganics, suggesting that the elevated concentrations detected in Round 1 were the result of suspended solids present in the samples. During Round 2, reported concentrations of chromium, lead, and nickel were below their respective drinking water standards or guidelines.

AOC 40

AOC 40 is located along the edge of Patton Road, in the southeastern portion of the Main Post. This area was used for the disposal of construction debris (masonry, asphalt, wire and metal), ash, stumps, and logs.

AOC 40 covers approximately 4 acres and was estimated to contain 110,000 cy of debris. Portions of the landfill area were situated in a wetland and were subsequently submerged under Cold Spring Brook Pond. The area was densely populated with trees and other vegetative cover. The northern edge of the landfill area dropped off abruptly to the wetland or to the pond with a difference in elevation ranging between 10 and 20 feet (ft). The area is also within a recharge zone for the Patton water supply well.

The results of the supplemental remedial investigation (RI) (ABB, 1993) at AOC 40 are summarized below.

Surface Water Contamination

Inorganic analytes were detected in surface water samples collected from Cold Spring Brook Pond. Surface water contamination did not pose a risk to ecological receptors at the debris disposal area, based on comparison to ecological benchmarks developed to be protective of aquatic organisms.

Sediment Contamination

Sediments in Cold Spring Brook Pond contained PAHs, pesticides, and inorganics. Arsenic and dichlorodiphenyldichloroethane (DDD) were detected in concentrations determined to pose a risk to ecological receptors.

Surface Soil Contamination

Samples collected from the landfill soil cover contained PAHs, pesticides, and inorganics. The relatively low concentrations of surface soil contaminants posed neither human health nor ecological risks.

Groundwater Contamination

Groundwater quality at AOC 40 was investigated by two rounds of sampling as part of the RI, and by two rounds of sampling as part of the supplemental RI. Contaminants detected in groundwater were primarily inorganics. The supplemental RI (ABB, 1993) concluded that AOC 40 was not the source of contamination.

SA 13

SA 13 was used between 1965 and 1990 for disposal of construction debris, stumps, and brush. Debris volume was estimated to be approximately 10,000 cy. The landfill was less than one acre in size and is located on the west side of Lake George Street near Hattonsville Road on the former Main Post. SA 13 is surrounded by large trees, but no trees were growing on the landfill itself. Tree stumps, limbs, and trunks were deposited on the surface of the landfill and down the steep lower slope. A wetland was located at the base of this slope.

The results of the Supplemental SI (ABB, 1994 and 1995) at SA 13 are summarized below.

Surface Water Contamination

Organic and inorganic chemicals were detected in surface water samples collected from the wet area at the toe of the debris area. Nitroglycerine was detected in one of four surface water samples, at a concentration above its drinking water standard. Inorganic chemicals in surface water, particularly mercury, presented potential risks to sensitive aquatic ecological receptors.

Sediment Contamination

Sediment at SA 13 contained PAHs, TPH, pesticides, and inorganics. Pesticides in sediment presented a potential risk to sensitive aquatic ecological receptors.

Surface Soil Contamination

Soil samples collected from stained areas directly over the debris area contained PAHs, TPH, pesticides, and inorganics. Surface soil samples collected from the debris area contained higher concentrations of contaminants than those collected down slope of the landfill.

Groundwater Contamination

Contaminants detected in groundwater at SA 13 were primarily inorganics. Elevated detections were attributed to turbidity in unfiltered samples, not to the landfill.

3.4 Initial Response

Details of the DCL feasibility studies and site investigations are discussed in Section 3 of the 2015 Devens Five-year Review Report (H&S, 2015). As noted above, SIs and RIs were completed at AOCs 9 and 40 and SA13 to verify the presence or absence of contamination and to further assess contaminant distribution. These investigations were used to define depth, extent, type of waste, composition of waste and site conditions to help identify remedial alternatives.

A ROD, issued in July 1999 [Harding Lawson Associates (HLA), 1999], presented the selected remedial actions for the seven debris disposal areas. The selected remedial alternative (Alternative 4c) required full excavation of AOC 9, AOC 40, SA 13, with on-site consolidation or off-site disposal options. In a separate evaluation after the ROD was issued, an evaluation of on-site versus off-site disposal options was conducted and disposal of the remedial debris in an on-site landfill to be built at the former golf course driving range on Patton Road was chosen (S&W, 2000a).

3.5 Basis for Taking Action

As summarized in Section 3.4, contaminants of concern included low levels of inorganic analytes in surface water and groundwater; PAH, TPH and inorganic analytes were detected in sediment samples from wet areas around AOC 9, AOC 40, and SA 13; and PAH, TPH, pesticides and inorganic analytes were detected in soil samples collected from above the debris areas at AOC 9, AOC 40, and SA 13.

The remedy component for AOC 9 was selected to assist the civilian redevelopment effort at Devens and remove the potential, future threat of contaminant release to area groundwater. Removal of landfill debris allowed for unimpeded expansion of the nearby wastewater treatment facility and eliminated the potential release of contaminants to groundwater.

The remedy component for AOC 40 eliminated the threat of potential, future risk to a nearby public groundwater supply well. Removal of landfill debris at AOC 40 allowed for unimpeded, expanded use of the water supply well and allowed for planned realignment of Patton Road.

The remedy component at SA 13 eliminated the threat of potential risk within an area of possible redevelopment. Removal of debris and wet area soil, followed by site restoration, addressed the potential ecological risks to sensitive aquatic receptors.

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4.0 REGULATORY ACTIONS

4.1 Record of Decision and Remedial Response Objectives

The remedial response objectives as defined by the 1999 ROD were:

- Prevent human exposure to groundwater contaminants released from Devens landfills that exceed acceptable risk thresholds;
- Protect human and ecological receptors from exposure to landfill soils having concentrations of contaminants exceeding acceptable risk thresholds;
- Prevent landfill contaminant releases to surface water that result in exceedance of the ambient water quality criteria (AWQC) or acceptable ecological risk-based thresholds;
- Reduce adverse effect from contaminated landfill media to the environment that would reduce the amount of land area available for natural resource use;
- Prevent exposure by ecological receptors to landfill-contaminated sediments exceeding acceptable risk-based thresholds and
- Support the civilian redevelopment effort at Devens.

4.2 Remedy Description

Key components of the selected remedy for the sites where consolidation of landfill debris was recommended are described below.

AOC 9, 11, and 40 and SA 13

- Mobilization/demobilization (Includes backhoes, bulldozers, and dump trucks mobilized/demobilized at AOC 9, AOC 11, AOC 40, and SA 13. Additional sediment removal equipment requiring mobilization at AOC 40 may include an excavator or a clamshell crane, watertight dump trucks, and water storage tanks);
- Site preparation (Includes clearing of trees, constructing temporary access roads, and installing silt fences and erosion control measures at AOC 9, AOC 11, AOC 40, and SA 13. At AOC 40, drum removal would be attempted. Construction of a lined basin for dewatering sediment, a lined drum storage area for staging drums, small decontamination pads, a stockpile area approximately 1 acre in size for storage of excavated materials, and a small parking area would be required);
- AOC 40 sediment removal with disposal either in the DCL or in an off-site landfill;
- AOC 40 drum removal with disposal either in the DCL or in an off-site landfill (It should be noted that this remedy was included in the ROD, but no drums were encountered during removal and consolidation construction operations.);
- Debris excavation, backfill, and re-grading;
- Wetland restoration at AOC 9, 11, and 40;
- Consolidation of excavated debris at the DCL, or transport to an off-site landfill;
- If required, cover system monitoring and maintenance at the DCL; and
- ICs and five-year site reviews at those sites where unrestricted future use is not achievable or economical.

43 Remedy Implementation

The decision to proceed with on-site consolidation was issued June 30, 2000, and a temporary (120 day) access agreement to begin construction was signed on September 15, 2000. The DCL was constructed at the former golf course driving range at the intersection of Patton Road and Queenstown Street in accordance with Massachusetts Department of Environmental Protection (MassDEP) Landfill Technical Guidance Manual (May 1997) and the Final Design Technical Specifications (EA Engineering, Science, and Technology, 1999). The remedial action closure report for the contributory sites and the landfill (Shaw, 2003a and b) presents the details of the Devens Consolidation Landfill construction activities.

Over the course of construction, approximately 591,804 tons of materials were placed at the landfill. Materials disposed of at the landfill included the debris excavated from the contributor sites. The approved landfill easement occupies 16.88 acres with approximately 8.0 acres used for debris disposal.

Key components of the selected remedy, Alternative 4C, which specified full excavation of the three contributor sites and consolidation of landfill debris on-site, are described below.

Remedial Action AOC 9

Excavation activities at AOC 9 began in January 2001 and were completed in June 2002. Debris was excavated from the 8.9-acre disposal area and transported to staging areas, which were used for material holding during sampling and waste characterization activities. Excavated debris was analyzed for waste disposal characteristics. Characterized debris material, consisting primarily of concrete, scrap steel, tires, soil, and miscellaneous demolition debris, was transported to the DCL for disposal. A total of 161,477 tons of debris materials from AOC 9 were disposed in the DCL.

During the excavation process, larger debris (i.e., wood, scrap steel, concrete debris and tires) was segregated from the stockpiled material and stored separately in an effort to recycle and reduce the volume of material to be disposed in the landfill. Segregated material was disposed of off-site at a licensed facility. Concrete debris was processed through a crushing plant for possible reuse as backfill in other areas, if analytical results indicated the material met the Preliminary Remediation Goals (PRG).

A total of 156,000 cy of debris was removed from AOC 9; this was 44,000 cy more than the original estimated volume of 112,000 cy. The 44,000 cy of additional debris was attributed to greater excavation depths due to extended debris limits beyond those originally estimated.

Cleanup goals for the disposal areas were established in the *Sampling and Analysis Plan* [Stone & Webster (S&W), 2000b] by using PRGs for residential soil. Following completion of excavation activities, restoration activities commenced. Restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002). The majority of the site was restored as upland areas. Upland areas were seeded with a restoration seed mixture that contained native grasses. The wetland area was restored by backfilling with clean fill and manufactured wetland soil. The restored wetland was stabilized with a custom wetland seed mix.

The property was transferred from Army ownership to MassDevelopment for redevelopment purposes in 2006. Institutional controls were recorded in the March 2006 deed (**Appendix B**) to prevent residential development of the property consistent with the Devens Reuse Plan.

Remedial Action AOC 40

Excavation activities at AOC 40 began in November 2000 and were completed in September 2002. Debris was excavated from the 3.9-acre disposal area and transported to the staging areas, which were used for material holding during sampling and waste characterization activities. Excavated debris was analyzed for waste disposal characteristics. Characterized debris material, consisting primarily of concrete, scrap steel,

stumps, soil and miscellaneous demolition debris, was transported to the DCL for disposal. A total of 166,799 tons of debris materials from AOC 40 were disposed in the DCL.

A total of 148,450 cy of debris was removed from AOC 40; this was 38,450 cy more than the original estimated volume of 110,000 cy. The 38,450 cy of additional debris was attributed to greater excavation depths than originally anticipated. It should be noted that although drum removal was included in the selected remedy, no drums were encountered during these remedial actions. Excavation limits to remediate the extent of debris encroached onto the existing roadway (Patton Road) adjacent to the disposal site. Road realignment was designed and constructed so that traffic would be detoured during the remedial activities.

Following completion of excavation activities, restoration activities began in September 2002 and were completed in October 2002. Due to the steep gradient, the side slopes adjacent to Patton Road were stabilized and protected by rip rap. Rip rap was placed from the base of the slope to approximately 10-foot above the waterline. Remainder of the slope was stabilized with six inches of loam and seeded with a native grass seed mixture. The restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002).

The property was transferred from Army ownership to MassDevelopment for redevelopment purposes in 2006. Institutional controls were recorded in the March 2006 deed (Appendix B) to prevent residential development of the property consistent with the Devens Reuse Plan.

Remedial Action SA 13

Debris was excavated from the 0.8-acre disposal area and transported to the staging area, which was used for material holding during sampling and waste characterization activities. Characterized debris material, consisting primarily of concrete, scrap steel, soil and miscellaneous demolition debris (i.e., glass and wood) along with some stumps and brush, was transported to the DCL for disposal. A total of 13,715 tons of debris materials from SA 13 were disposed in the DCL.

During the excavation process, larger debris (i.e., wood, scrap steel, concrete debris and tires) was segregated from the stockpiled material and stored separately to recycle and reduce the volume of material to be disposed in the landfill. Material that resulted from these efforts was disposed of off-site at a licensed facility. Although the concrete was segregated and processed, the end-product did not meet the requirements for reuse as backfill or road base material. Processed concrete was mixed with the debris stockpile and was disposed at the DCL.

A total of 13,900 cy of debris was removed from SA 13, 3,900 cy more than the original estimated volume of 10,000 cy. The 3,900 cy of excess debris was attributed to deeper excavation over extended debris limit than originally anticipated. The actual excavation depths ranged from 4 ft to 8 ft deeper than proposed excavation grades throughout the center of the excavation area.

Following completion of excavation activities, restoration activities commenced in October 2001. Minimal restoration operations took place at SA 13. Slopes were graded as necessary to provide a safe area and to promote drainage to feed the small wetland area to the south. Topsoil was placed over disturbed areas that were then seeded to stabilize and reestablish vegetation of the wetland and upland areas. Restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002).

The property was transferred from Army ownership to MassDevelopment for redevelopment purposes in 2006. Institutional controls were recorded in the March 2006 deed (Appendix B) to prevent residential development of the property consistent with the Devens Reuse Plan.

4.4 System Operations/Operation and Maintenance

There is no operation and maintenance activities performed at the three DCL contributor sites (AOC 9, AOC 40, and SA 13) addressed in this Addendum.

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5.0 PROGRESS SINCE LAST FIVE-YEAR REVIEW

The following is the complete Protectiveness Statement for the DCL from the 2010 Devens Five-Year Review Report (HGL, 2010):

“The remedy at the DCL and the DCL contribution sites AOCs 9, 40, and SA 13 are protective of human health and the environment, and exposure pathways that could result in unacceptable risk are being controlled.

Long-term protectiveness of the remedial action will be verified by groundwater monitoring at the DCL to assess potential leachate migration. Current monitoring data indicate that the remedy is functioning as required and will be verified by groundwater monitoring at the DCL to assess potential leachate migration.”

The 2010 Devens five-year review concluded that no Recommendations and Follow-Up Actions were needed at any of the DCL contributor sites subject to five-year reviews (HGL, 2010).

Per the ROD, the DCL contributor sites AOC 9, 40, and SA 13 were subject to ICs and five-year reviews if “unrestricted future use is not achievable or economical”. During the review period, ICs were in place at the DCL contributor sites AOC 9, AOC 40, and SA 13 to prevent the use of the sites for residential purposes.

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6.0 FIVE-YEAR REVIEW PROCESS

The review process for a five-year review includes a community notification and involvement, a historical document review, data review, site inspections, and interviews.

6.1 Administrative Components

The commencement of the 2015 five-year review for Former Fort Devens Army Installation was announced at the RAB meeting on January 15, 2015. The 2015 Devens five-year review was led by Robert Simeone, Army BRAC Environmental Coordinator and Carol Keating, USEPA Remedial Project Manager. Elizabeth Anderson of H&S Environmental, Inc. assisted in the review as the representative for the support agency.

The review consisted of the following components:

- Community Notification and Involvement
- Document Review;
- Data Review;
- Site Inspection; and
- Interviews.

6.2 Community Notification and Involvement

Activities to involve the community in the five-year review process were initiated with a meeting in January 2015 among the BRAC Cleanup Team including the Army, USEPA, and MassDEP. A notice was published in the local newspapers, the “Lowell Sun” on January 25, 2015, and in the Regional paper on January 30, 2015, stating that there was a five-year review and inviting the public to submit any comments to the BRAC Division of the U.S. Army Garrison, Fort Devens. The results of the review and the report will be made available at the Site information repository located at The Devens Repository, Department of the Army, Base Realignment and Closure Division, U.S. Army Garrison Fort Devens, 30 Quebec Street, Unit 100, Devens, MA 01434-4479.

6.3 Historical Document Review

Historical documents were reviewed with reference to the DCL contributor sites. These documents included the ROD (HLA, 1999) and previous five-year reviews.

6.4 Data Review

No sampling was conducted at any of the DCL contributor sites because long-term monitoring of the DCL contributor sites is not required under the selected remedial action.

6.5 Site Transfer

The three contributor site properties were transferred from the Army to MassDevelopment in March 2006 via Quit Claim deed (Parcels A2A, A4 and A8). A copy of the Quit Claim deed is included as Appendix B. Institutional Controls were incorporated into the deed to prevent residential development of the properties. This restriction is consistent with the 1994 Devens Reuse Plan that designates these areas for non-residential use only. There have been no changes in land-use at the individual contributor sites. Per the requirements of the 2006 transfer deed and the Devens Reuse Plan, these contributor sites are not being used, or under development, for residential purposes. Devens zoning only allows for commercial or industrial development (Innovation and Technology Business) in the area of SA 13. Devens zoning at AOC 9 indicates Environmental Business. Development at AOC 9 for residential purposes would not be allowed.

AOC 40 is zoned for Open Space/Recreational use and would not be developed for residential purposes. Figure 3 (Attachment A) indicates the zoning districts at Devens.

6.6 Site Inspection

The site inspection conducted on August 19, 2016 indicated that AOC 9 remains undeveloped. AOC 40 is along Patton Road. This location is a reconstructed wetland and is unsuitable for redevelopment. SA 13 is an area west of Lake George Street. The location is a shrub swamp and development of this area is not likely. Site Inspection reports, including photographs documenting site conditions, are included as **Attachment C**.

6.7 Interviews

As part of the five-year review process, interviews were conducted in accordance with the USEPA Five Year Review Guidance (2001) and summaries of each interview are provided in Appendix B of the 2015 Five-Year Review Report (H&S, 2015).

- Dan Groher, USACE
- Bob Simeone, USACE
- Pam Papineau, Ayer Board of Health
- Ron Ostrowski, MassDevelopment
- Deputy Fire Chief Adams, Devens Fire Department
- Ayer Police Chief Murray, Ayer Police Department
- Jason Overgaard, Sovereign Consulting (ATP Operator)
- Richard Doherty, People of Ayer Concerned about the Environment

In general, comments related to the site were positive and supportive. The Devens Deputy Fire Chief did express a concern related to insufficient communication regarding site activities. When asked, he did indicate that the Fire Department was routinely contacted regarding invasive work related to potential hazardous materials and contaminants to provide notice and preparation in the event of the required emergency response condition. His general comment was that overall project communication could be improved. Mr. Doherty of PACE indicated that the community appreciated receiving draft reports for review prior to final submittal.

7.0 TECHNICAL ASSESSMENT

This section details responses to the key questions from the 2001 USEPA Guidance on conducting five-year reviews as follows:

- Question A: Is the remedy functioning as intended by the decision documents?
- Question B: Are exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of the remedy still valid?
- Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

Question A: Is the remedy functioning as intended by the decision documents?

Yes. The remedy for the three DCL contributor sites (AOC 9, AOC 40, and SA 13) is functioning as intended by the decision document. The primary intent was to protect groundwater, which has been achieved by removing and consolidating the excavated debris at the DCL.

Remedial Action Performance: The remedial action at the three DCL contributor sites continues to function as designed. Debris and contaminated materials were excavated from each site and consolidated at the DCL and the sites were restored.

System Operations/O&M: There are no requirements for O&M at the three DCL contributor sites.

Opportunities for Optimization: Since there are no O&M or monitoring requirements at any of the DCL contributor sites, there are no opportunities for optimization of the remedy.

Early Indicators of Potential Issues: There is no indication of potential issues at any of the three DCL contributor sites.

Implementation of Institutional Controls and Other Measures: Transfer of AOC 9, AOC 40, and SA 13 to MassDevelopment occurred in March 2006 and ICs for these sites were included in the Findings of Suitability to Transfer and incorporated into the deeds. The ICs specify the restriction of residential development within the three sites. The IC site inspections and interviews confirmed there was no residential development at AOC 9, AOC 40, and SA 13.

Immediate threats that may have been present at the three DCL contributor sites were addressed through the remedial action that included excavation, consolidation of excavated debris at the DCL, and site restoration.

Question B: Are exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of the remedy still valid?

Appendix D includes a table of ARARs from the 1999 ROD (i.e., D-1) and a table with a preliminary list of ARARs that have changed since ROD issuance (i.e., D-2). Army will conduct a more thorough analysis of each of the standards and TBCs (i.e., exposure assumptions, toxicity data, cleanup levels and remedial action objectives) included in the 1999 ROD as part of the next (2020) Devens five year review to confirm that post-ROD changes to these standards and TBCs, if any, would/do not affect the protectiveness determination for the remedy(s) selected for the DCL and the DCL Contributor Sites.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No information has come to light that would call into question the short-term protectiveness of the remedy. In order for the remedy to be protective in the long-term, Army must conduct a more thorough analysis of each of the standards and TBCs (i.e., exposure assumptions, toxicity data, cleanup levels and remedial action objectives) included in the 1999 ROD as part of the next (2020) Devens five year review to confirm that post-ROD changes to these standards and TBCs, if any, would/do not affect the protectiveness of the remedy(s) selected for the DCL and the DCL Contributor Sites.

No natural disaster impacts occurred at the DCL contributor sites during this review period.

8.0 ISSUES

While no issues affecting short-term protectiveness of the remedy for three DCL Contributor Sites, AOC 9, AOC 40, and SA 13 were identified in this (2015) Devens Five-Year Review Addendum, the ARARs assessment is not yet complete. An analysis of each of the ARARs and TBCs (i.e., exposure assumptions, toxicity data, cleanup levels and remedial action objectives) included in the 1999 ROD must be conducted in the next (2020) Devens five-year review to ensure protectiveness in the long-term.

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9.0 RECOMMENDATIONS AND FOLLOW-UP ACTIONS

Although this (2015) Devens Five-Year Review Addendum did not identify issues affecting current protectiveness of the remedy for the DCL Contributor Sites, Army must complete its ARARs assessment in order to ensure protectiveness in the long-term. Specifically, Army has agreed to assess each of the ARARs and TBCs (i.e., exposure assumptions, toxicity data, cleanup levels and remedial action objectives) included in the 1999 ROD as part of the next (2020) Devens five year review to confirm that post-ROD changes to these standards and TBCs, if any, would/do not affect protectiveness for the remedy(s) selected for the DCL and the DCL Contributor Sites. In addition, Army may prepare an updated baseline risk assessment for regulatory review and concurrence to evaluate attainment of unlimited use/unrestricted exposure (UU/UE) cleanup goals and support removal of ICs prohibiting residential use of these properties.

Finally, in accordance with amended floodplain management and wetland protection regulations (44 C.F.R. 9, Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Protection of Wetlands)), Army will ensure protection of wastes left in place within a floodplain by monitoring, managing and repairing, if necessary, rip-rap and/or soil covers up to the 500- year flood elevation. The amended floodplain regulations (*see* Appendix D-2) will also be discussed and more thoroughly evaluated as part of the next (2020) Devens five-year review.

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10.0 PROTECTIVENESS STATEMENT

There are no LTM or O&M requirements in place for the DCL contributor sites, AOC 9, AOC 40, and SA13. Per requirements set forth in the 1999 ROD, 2006 transfer deed and the Devens Reuse Plan, annual site inspections of the DCL contributor sites confirmed that these areas are not currently used, or under consideration for being used, for residential purposes.

The remedy at the DCL contributor sites is Short-Term Protective. The remedy currently protects human health and the environment because institutional controls are enforced, and no exposures are occurring or imminent. However, for the remedy to be protective in the long-term, Army must complete its ARARs assessment in the next (2020) Devens five-year review in accordance with CERCLA, the NCP and EPA's five-year review guidance to ensure protectiveness. Army has agreed to build upon the preliminary work conducted as part of this five-year review Addendum and complete its ARARs assessment in the next (2020) Devens five-year review.

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11.0 NEXT REVIEW

The next five-year review for the DCL and its contributor sites, AOC 9, AOC 40, and SA 13 will be conducted in 2020 as part of the five-year review for the Former Fort Devens Army Installation BRAC Legacy Sites. ICs will remain in place until an updated human health risk assessment is prepared and submitted to EPA and MassDEP for concurrence/approval that the contributor sites are deemed suitable for UU/UE.

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**ATTACHMENT A
FIGURES**

- Figure 1 Devens Consolidation Landfill (DCL) Contributor Site Locations
- Figure 2 Devens Consolidation Landfill
- Figure 3 Devens Zoning Districts

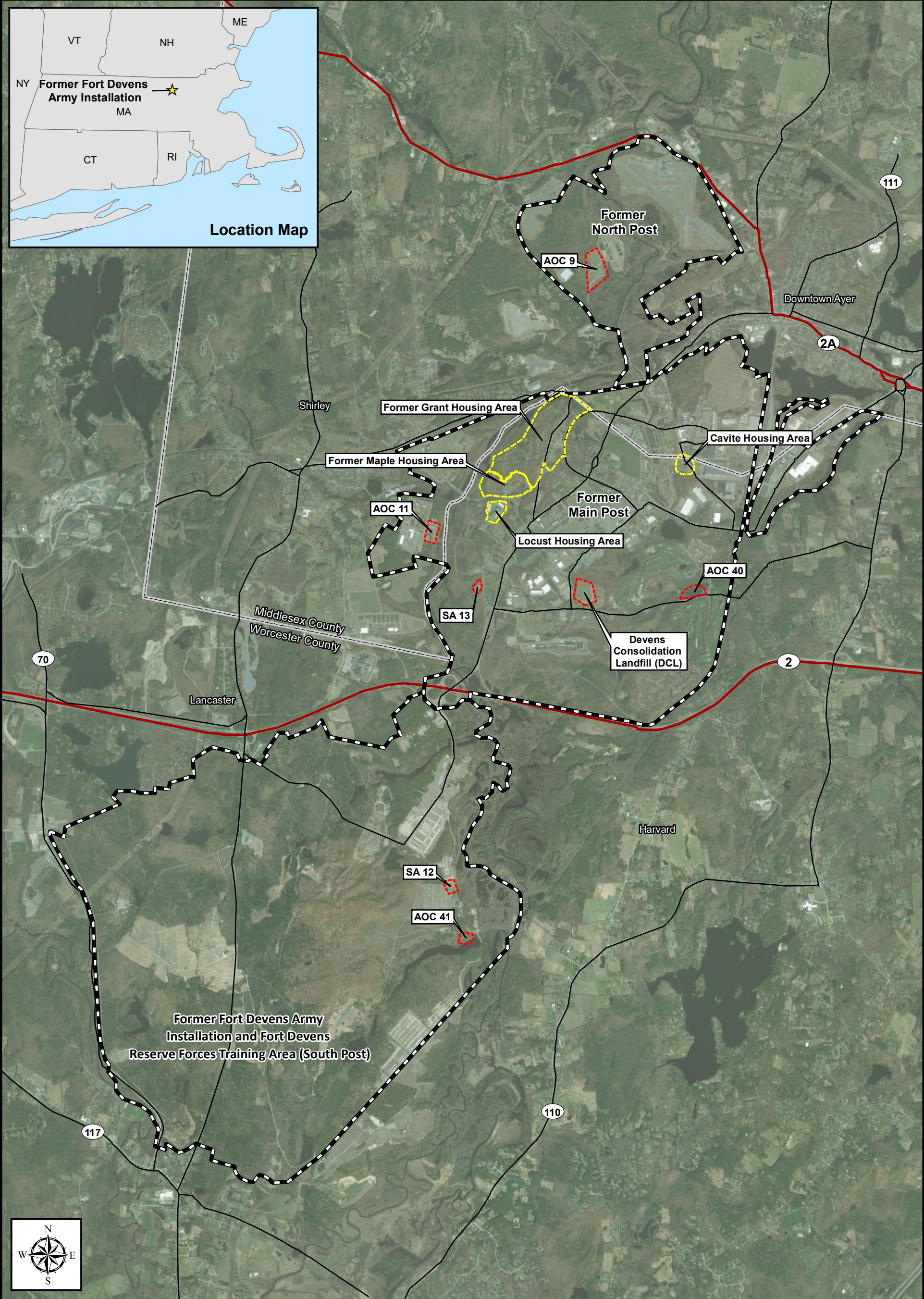


Figure 1 Devens Consolidation Landfill (DCL) Contributor Site Locations	Legend <div><div></div> Approximate AOC Area</div> <div><div></div> Approximate Housing Area</div> <div><div></div> Highway</div> <div><div></div> Major Road</div> <div><div></div> County Line</div> <div><div></div> Former Fort Devens Boundary</div>	2015 Five-Year Review Addendum DCL Contributor Sites			
		Former Fort Devens Army Installation, Devens, Massachusetts			
		KOMAN Government Solutions, LLC 293 Boston Post Road West, Suite 100, Marlborough, MA 01752			
		<div>References: LTMMMP Update (Sovereign, 2015) Aerial Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community</div>	<div>01,7503,500</div> <div>Feet</div>	<div>Date:</div> <div>02/15/2018</div>	<div>Figure</div> <div>1</div>

Figure 2
Devens Consolidation Landfill



Legend

- LTM Sample Well
- LTM Well - Gauge Only
- Gas Vent
- Monitoring Well - Destroyed
- LFM-03-07 Well/Vent Identification
- Topographic Contour (ft AMSL)

Notes:

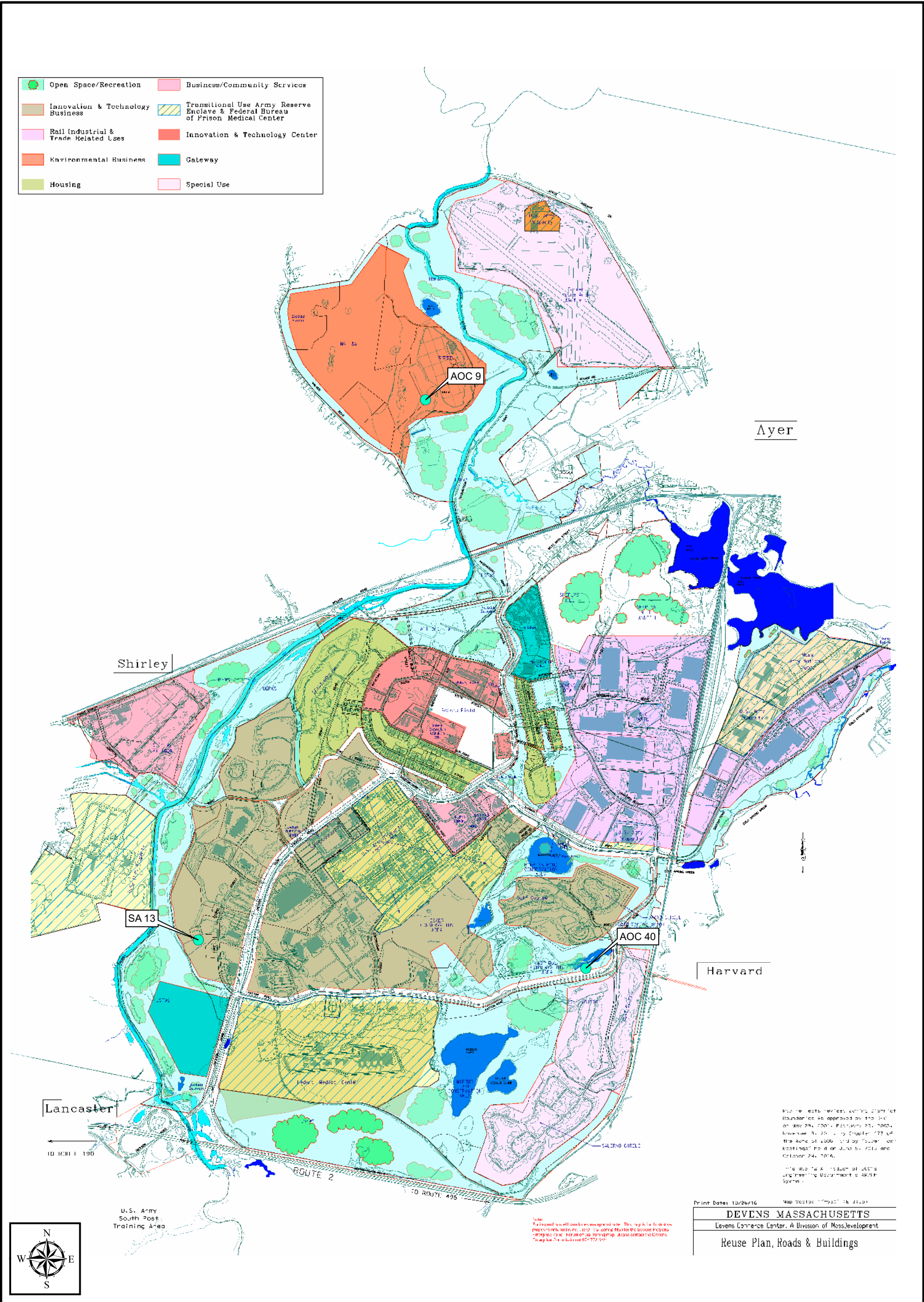
LFM-99-06A was replaced by LFM-99-06A-RP in September 2015.


Gas vent locations were approximated based upon the locations displayed in Figure 2 of USACE New England District's Devens Consolidation Landfill 2004 Annual Report.

ft AMSL = feet above mean sea level
LTM = long term monitoring

Aerial Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

2015 Five-Year Review Addendum Devens Consolidation Landfill			
Former Fort Devens Army Installation Devens, Massachusetts			
KOMAN Government Solutions, LLC 293 Boston Post Road West, Suite 100, Marlborough, MA 01752			
	Date: 02/15/2018	Figure 2	

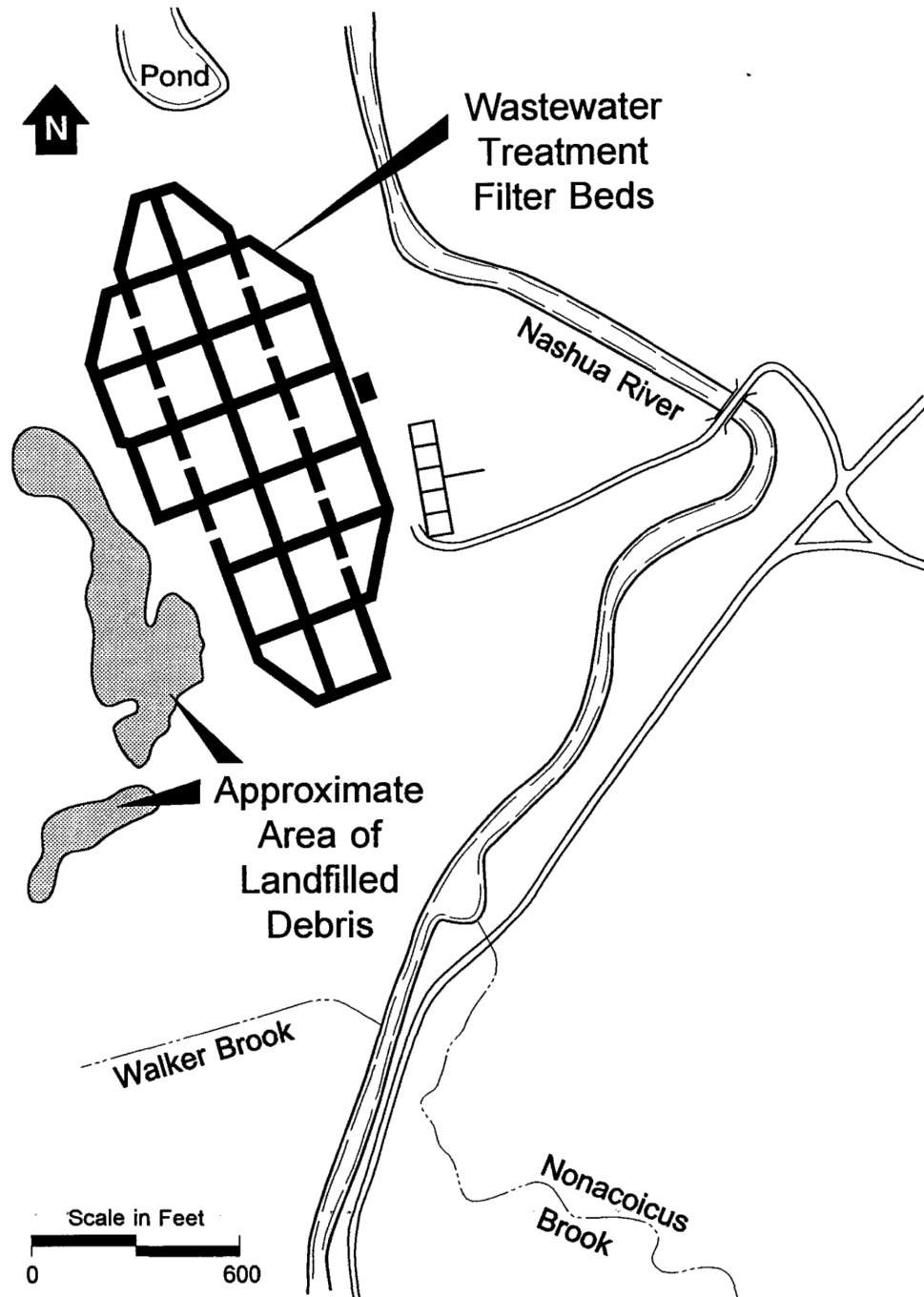


<div>Figure 3 Devens Zoning Districts</div>	<div>Legend</div> <div><div><div></div><div>Area of Contamination (AOC)</div></div></div> <div><div>Note:</div><div>Zoning and parcel boundaries are approximate. This map is for illustrative purposes only and is not the Official Zoning Map for the Devens Regional Enterprise Zone. For an official zoning map, please contact the Devens Enterprise Commission at 978.772.8831.</div></div>	<div>2015 Five-Year Review Addendum DCL Contributor Sites</div>				
		<div>Former Fort Devens Army Installation, Devens, Massachusetts</div>				
		<div>KOMAN Government Solutions, LLC 293 Boston Post Road West, Suite 100, Marlborough, MA 01752</div>				
<div>Source: Reuse Plan, Roads & Buildings - Devens Commerce Center, A Division of MassDevelopment Product of DCC's Engineering Department's AM/FM System 10/26/2016</div>		<div><div>01000 190</div><div>U.S. Army South Post Training Area</div><div>ROUTE 2</div><div>TO ROUTE 495</div><div>TO ROUTE 190</div></div>	<div><div>0 1,000 2,000</div><div><div></div><div>Feet</div></div></div>	<div>Date: 02/16/2018</div>	<div>Figure 3</div>	<div></div>



ATTACHMENT B

CADD Drawings of Original Site Maps



AOC 9 Site Map

Former Fort Devens Army Installation and Sudbury Annex
Devens, Massachusetts

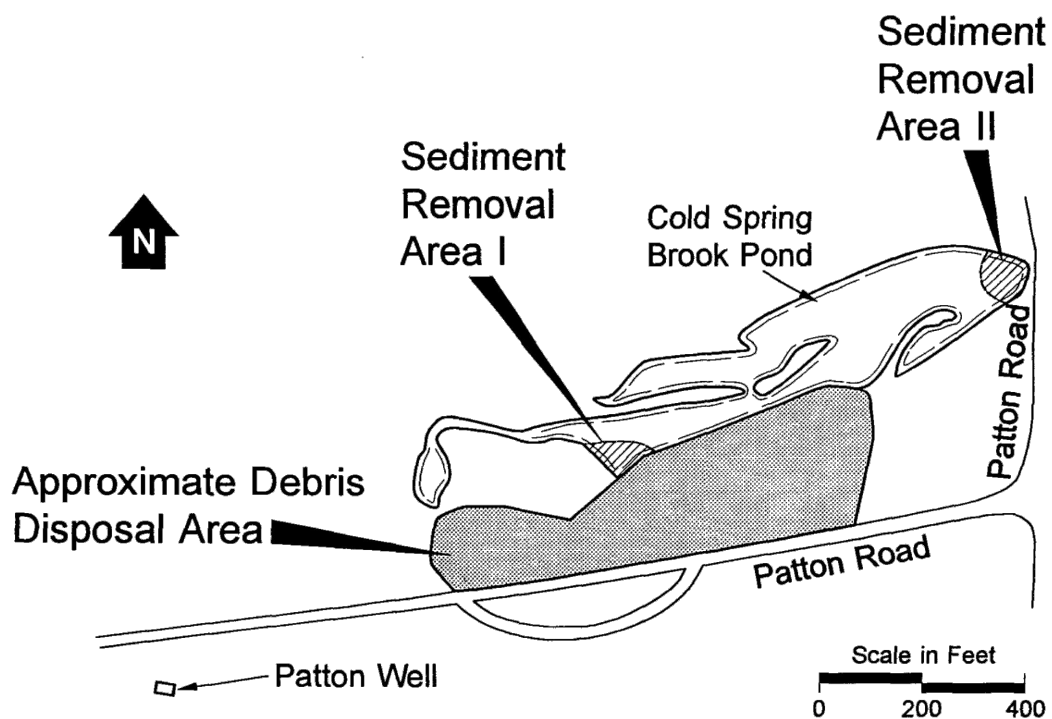
KOMAN Government Solutions, LLC
160 East Main Street, Suite 2F, Westborough, MA 01581


Scale: As Noted

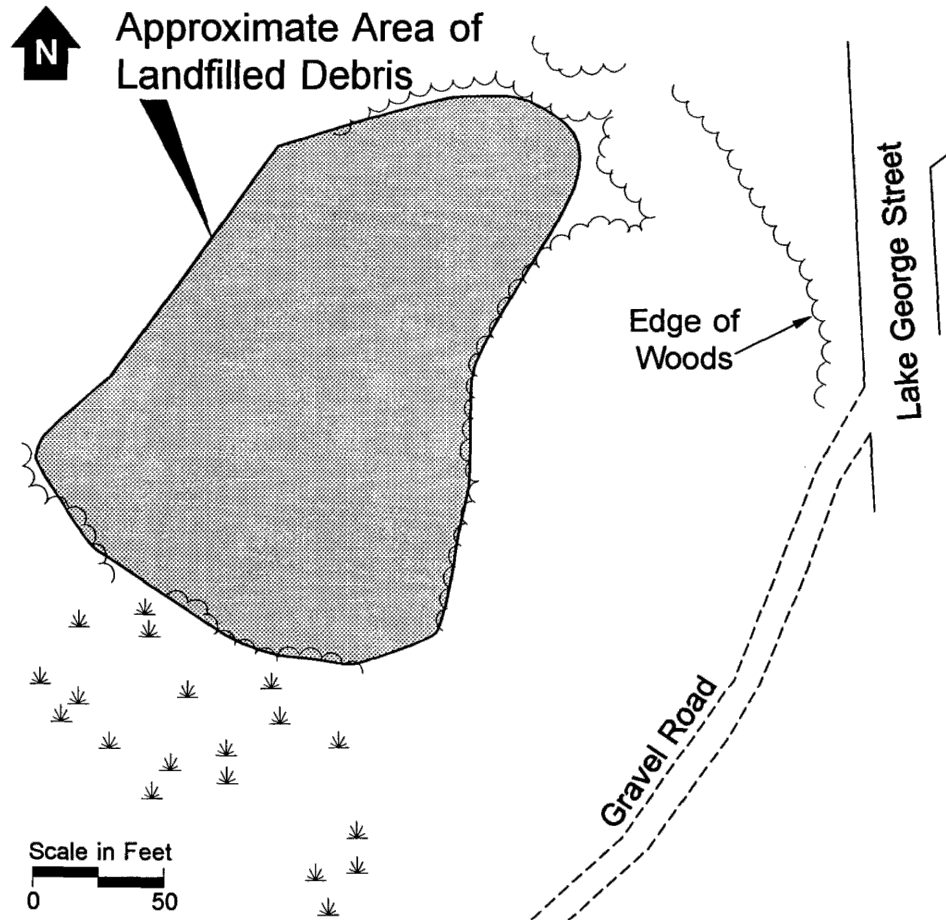
Date:
09/14/2016


Figure
2





AOC 40 Site Map			
Former Fort Devens Army Installation and Sudbury Annex Devens, Massachusetts			
KOMAN Government Solutions, LLC 160 East Main Street, Suite 2F, Westborough, MA 01581			
Scale: As Noted	Date: 09/14/2016	Figure 3	



SA 13 Site Map			
Former Fort Devens Army Installation and Sudbury Annex Devens, Massachusetts			
KOMAN Government Solutions, LLC 160 East Main Street, Suite 2F, Westborough, MA 01581			
Scale: As Noted	Date: 09/14/2016	Figure 4	



ATTACHMENT C

**Site Inspections and Photographs Documenting Site Conditions at the
DCL Contributor Sites**

Inspection Checklist

This checklist has been developed from the USEPA guidance document Comprehensive Five Year Review Guidance dated June 2001 (OSWER No. 9355.7-03B-P) and from the 2015 Long-Term Monitoring and Maintenance Plan, Devens, Massachusetts. The Checklist was modified to site-specific conditions as recommended by the guidance document. The checklist will also be used to assist in compiling information for the five- year review.

I. Site Information		
Site Name: DCL Contributor Site AOC 9 Filter Bed Road, Ayer, MA Location: AOC 9	Name: Elizabeth Anderson Affiliation: KOMAN Government Solutions, LLC Date: August 19, 2016 Weather: Clear, 85oF	
Remedy Includes: No Further Action. Inspection to verify no change in site conditions since remedial action in 2000.		
Inspectors: Elizabeth Anderson		
Site Map Attached:		
II Documentation & Records		
Item	Check One	Comments
Any related notices filed with Devens Enterprise Commission?	Yes No	No. No activity. Location is within Oxbow Wildlife Refuge
Any related Department of Public Works permits found?	Yes No	No. None found
Any related zoning permits or variances found?	Yes No	No. None found.
Any related Conservation Commission findings, proposals or notices of intent found?	Yes No	No. None found.
III Physical On-site Inspection		
Item	Check One	Comments
Any evidence of new construction or excavation present in the area of the remedy?	Yes No	No. No evidence of construction activities observed.
Is there evidence of damage to the remedy?	Yes No	No. There is no damage,
Any groundwater extraction wells present?	Yes No	No. No groundwater extraction wells are present.
Is there sufficient access to the site for monitoring?	Yes No	Yes. Site is accessible.
Any signs of increased exposure potential?	Yes No	No. No exposure potential exists.

Name: Elizabeth Anderson

Signature: 

Photo documentation:



View of AOC 9



Additional view of area.

Inspection Checklist

This checklist has been developed from the USEPA guidance document Comprehensive Five Year Review Guidance dated June 2001 (OSWER No. 9355.7-03B-P) and from the 2015 Long-Term Monitoring and Maintenance Plan, Devens, Massachusetts. The Checklist was modified to site-specific conditions as recommended by the guidance document. The checklist will also be used to assist in compiling information for the five- year review.

I. Site Information		
Site Name: DCL Contributor Site AOC 40 Patton Road, Ayer, MA Location: AOC 40	Name: Elizabeth Anderson Affiliation: KOMAN Government Solutions, LLC Date: August 19, 2016 Weather: Clear, 85oF	
Remedy Includes: No Further Action. Inspection to verify no change in site conditions since remedial action in 2000.		
Inspectors: Elizabeth Anderson		
Site Map Attached:		
II Documentation & Records		
Item	Check One	Comments
Any related notices filed with Devens Enterprise Commission?	Yes No	No. No activity. Location is within Oxbow Wildlife Refuge
Any related Department of Public Works permits found?	Yes No	No. None found
Any related zoning permits or variances found?	Yes No	No. None found.
Any related Conservation Commission findings, proposals or notices of intent found?	Yes No	No. None found.
III Physical On-site Inspection		
Item	Check One	Comments
Any evidence of new construction or excavation present in the area of the remedy?	Yes No	No. No evidence of construction activities observed.
Is there evidence of damage to the remedy?	Yes No	No. There is no damage,
Any groundwater extraction wells present?	Yes No	No. No groundwater extraction wells are present.
Is there sufficient access to the site for monitoring?	Yes No	Yes. Site is accessible.
Any signs of increased exposure potential?	Yes No	No. No exposure potential exists.

Name: Elizabeth Anderson

Signature: 

Photo documentation:



AOC 40



Additional view



Additional view



Additional view



Inspection Checklist

This checklist has been developed from the USEPA guidance document Comprehensive Five Year Review Guidance dated June 2001 (OSWER No. 9355.7-03B-P) and from the 2015 Long-Term Monitoring and Maintenance Plan, Devens, Massachusetts. The Checklist was modified to site-specific conditions as recommended by the guidance document. The checklist will also be used to assist in compiling information for the five- year review.

I. Site Information		
Site Name: DCL Contributor Site SA 13 Lake George Street, Harvard, MA Location: SA 13	Name: Elizabeth Anderson Affiliation: KOMAN Government Solutions, LLC Date: August 19, 2016 Weather: Clear, 85oF	
Remedy Includes: No Further Action. Inspection to verify no change in site conditions since remedial action in 2000.		
Inspectors: Elizabeth Anderson		
Site Map Attached:		
II Documentation & Records		
Item	Check One	Comments
Any related notices filed with Devens Enterprise Commission?	Yes No	No. No activity. Location is within Oxbow Wildlife Refuge
Any related Department of Public Works permits found?	Yes No	No. None found
Any related zoning permits or variances found?	Yes No	No. None found.
Any related Conservation Commission findings, proposals or notices of intent found?	Yes No	No. None found.
III Physical On-site Inspection		
Item	Check One	Comments
Any evidence of new construction or excavation present in the area of the remedy?	Yes No	No. No evidence of construction activities observed.
Is there evidence of damage to the remedy?	Yes No	No. There is no damage,
Any groundwater extraction wells present?	Yes No	No. No groundwater extraction wells are present.
Is there sufficient access to the site for monitoring?	Yes No	Yes. Site is accessible.
Any signs of increased exposure potential?	Yes No	No. No exposure potential exists.

Name: Elizabeth Anderson

Signature: 

Photo documentation:



SA 13 former lay down area



SA 13



Additional view of SA13



Additional view of SA 13



Additional view of SA 13



APPENDIX A
Responses to Comments

**U.S. ARMY RESPONSES TO U.S. EPA COMMENTS ON THE
2015 FIVE YEAR REVIEW ADDENDUM
DEVENS CONSOLIDATED LANDFILL (DCL) CONTRIBUTOR SITES
FORMER FORT DEVENS ARMY INSTALLATION, DEVENS, MASSACHUSETTS
February 2017**

The following U.S. Army responses pertain to the U.S. Environmental Protection Agency (EPA) comments dated December 20, 2016 on the *2015 Five Year Addendum – Devens Consolidated Landfill Contributor Sites* for the Former Fort Devens, dated September 2016.

GENERAL COMMENTS

1. The purpose of a FYR is to evaluate the implementation and performance of a remedy in order to determine if the remedy is or will be protective of human health and the environment. When an IC is a component of a remedial action, the current and long-term effectiveness of that IC should be evaluated and relevant information about that IC should be included as part of the CERCLA-required FYR protectiveness determination. As you may recall, the 2005 Devens FYR evaluated the DCL and its contributor sites because ICs were presented in the 1999 ROD to restrict use of these sites for residential purposes. Although Army initially omitted these sites from the 2010 FYR (based on its position that they had been remediated to unrestricted use/unlimited exposure (UU/UE) levels), they were subsequently included in the 2010 FYR Report in response to EPA's July 29, 2010 comments and subsequent discussions related thereto. Since no formal changes have been made to 1999 ROD since release of the 2005 and 2010 FYRs, ICs are still a required component of the selected remedy and must be evaluated in the 2015 FYR. As requested in EPA's comments on the draft 2010 and 2015 reports, statements regarding the elimination of unacceptable risk, applicability of ICs and requirements for future FYRs have yet to be evaluated and approved by EPA and MassDEP and as such should be removed from the FYR Addendum for the DCL and its contributor sites.

Response: This Addendum is required to address the three DCL contributor sites (Area of Concern [AOC] 9, AOC 40, and Study Area [SA] 13) that have Institutional Controls (ICs) in place, as requested by EPA in their March 18, 2016 letter regarding "Former Fort Devens Installation-Dispute Resolution – (Issues 6-8), 2015 Devens Five Year Review (FYR) Report". The DCL itself was addressed in the 2015 Devens FYR Report and is not addressed in this Addendum. The document will be revised to include an evaluation of the current and long-term effectiveness of ICs for AOC 9, AOC 40, and SA 13, as described in the responses to the page-specific comments below. Statements regarding the elimination of unacceptable risk, applicability of ICs, and requirements for future FYRs will be revised, as indicated in the responses to page-specific comments below.

2. The draft 2015 FYR Addendum must include all areas and components addressed by the 1999 ROD (i.e. Devens Consolidation Landfill (DCL) and its contributor sites). Specifically, the draft report must be amended to more clearly identify and evaluate the specific remedial components selected for each area and provide sufficient evidence to support the required protectiveness determination. As discussed in the page-specific comments below, many of the specific details necessary to fully evaluate the current and future protectiveness of the selected remedies for the areas addressed in this 2015 FYR Report were not provided.

Response: See the response to Comment 1. The document will be revised to identify and evaluate the specific remedial components selected for the three DCL contributor areas (AOC 9, AOC 40, and SA 13) and provide sufficient evidence to support the required protectiveness determination, as described in the responses to the page-specific comments below.

3. Despite EPA's repeated requests to follow the requirements set forth in EPA's June 2001, "Comprehensive Five-Year Review Guidance," the draft Devens DCL 2015 FYR Report Addendum does not address/include each of the required elements. This is unacceptable and must be elevated for Army/EPA management resolution.

Response: The document will be revised to follow the *Comprehensive Five-Year Review Guidance* (EPA 540-R-01-007, June 2001).

4. Since this submittal was issued as an Addendum to the 2015 FYR, it should include a "FYR Summary Form" that includes all of the required information required per EPA's Guidance for conducting FYRs and EPA's March 18, 2016 correspondence summarizing the Additional Work required to resolve remaining 2015 FYR Report deficiencies (Issues 6-8). Specifically, the FYR Summary Form should include/address the following:
 - Site Identification- Former Fort Devens – must refer to the Site as identified in CERCLA;
 - Has the Site Achieved Construction Completion – Contrary to the Summary Form attached to Army's September 2015 FYR, the response to this question should be "No" since the question refers to the entire Former Fort Devens NPL Site;
 - Review Status –As discussed in EPA's September 9, 2015 comments, for Site with multiple OUs, the statutory requirement to perform five-year requirements is triggered by the "the initiation of the first remedial action that leaves hazardous substances, pollutants or contaminants on site at levels that do not allow for unlimited use and unrestricted exposure." For the former Fort Devens, the "Triggering action date" was the 1995 ROD for Shepley's Hill Landfill (SHL).
 - OUs without Issues/Recommendations – This section should identify all areas addressed in the 1999 ROD where remedial components have been successfully implemented, are preventing exposure to potential site-related risks, and are effectively providing short- and long-term protection of human health and the environment.
 - Issues and Recommendations - The "Recommendation" for the DCL and its contributor sites cannot be "No Further Action" since the 1999 ROD required, in addition to items, the implementation of ICs to prohibit residential use of these areas. This section should be amended to reflect the fact that while there are currently no issues that affect the protectiveness of the 1999 remedy, Army believes that ICs prohibiting residential use of specific parcels are no longer necessary because contaminant concentrations have been remediated to residential cleanup levels. Army is recommending, therefore, that an updated baseline risk assessment be prepared for those parcels which have been deemed suitable for UU/UE and upon EPA and MassDEP concurrence, the removal of ICs from the 1999 ROD will be memorialized in an Explanation of Significant Differences (ESD). Please be advised, however, that until these sites are deemed suitable for unrestricted use/unlimited exposure (based on EPA and MassDEP concurrence/approval of an updated human health risk assessment) and ICs/LUCs are subsequently removed from the 1999 remedy (via an Explanation of Significant Differences (ESD)) these sites cannot be removed from the five-year review process (see page-specific comment 16 below).

- Protectiveness Statement – The evaluation of IC protectiveness should be combined with the evaluation of all 1999 remedial components such that an overall protectiveness statement can be developed, using the answers to recommended Questions A, B, and C and the information developed during the FYR process.

Response: The requested FYR Summary Form will be included in the revised document for the DCL contributor sites.

PAGE-SPECIFIC COMMENTS

5. Page v, Table of Contents – As requested in EPA’s September 9, 2016 comments on the draft 2015 FYR Report, the document should be amended to follow the format in EPA’s June 2001, “Comprehensive Five-Year Review Guidance”. Specifically, the Table of Contents (and corresponding AOC-specific section) should be amended to include and/or adequately address each of the deficiencies identified in the proceeding comments.

Response: The document will be revised to follow the *Comprehensive Five-Year Review Guidance* (EPA 540-R-01-007, June 2001).

6. Page 1, Section 1.1– As discussed in EPA’s September 9, 2015 comments on the draft 2015 Five Year Review (FYR) Report, the FYR is being conducted in accordance with CERCLA, the NCP and EPA’s June 2001, “Comprehensive Five-Year Review Guidance” and not “because there was a disagreement between EPA and Army.” As you aware, ICs were incorporated into the quitclaim deed for parcels A2A (AOC 9), A8 (SA13), and A4 (AOC 40) to prevent residential development of the properties. Due to the LUCs placed in the quitclaim deed, the DCL and the three contributor sites became (and remain) subject to five-year reviews (AOC 11 did not include LUCs because it was remediated to unrestricted reuse). As previously discussed, because there have no formal changes to the 1999 remedy, the Army remains statutorily obligated to prepare and submit FYRs for these areas. Please revise the last sentence accordingly.

Response: The last two sentences of the first paragraph of Section 1.1 will be revised to read as follows:

“This addendum is required because hazardous substances, pollutants, or contaminants remain at three DCL contributor sites (AOC 9, AOC 40, and SA 13) above levels that allow for unlimited use and unrestricted exposure.”

7. Page 1, Section 1.1 – For reasons discussed in EPA’s September 9, 2016 comments (and comment 2 above), the current discussion needs to be expanded to specifically identify and discuss the DCL and seven “contributor sites” and include a more thorough explanation as to why some of the contributor sites were included in the 2010 FYR but eliminated from evaluation in the 2015 FYR. While the Army agreed to expand the discussion, the language proposed in its response to EPA’s comments, was not included in the draft FYR Addendum.

Response: Additional text will be added to identify and discuss the DCL and seven contributor sites, and explain why only the three (AOC 9, AOC 40, and SA 13) of the seven contributor sites are subject to five-year reviews. As discussed above, the DCL itself was addressed in the 2015 Devens FYR Report and is not addressed in this Addendum.

Additional text presenting the foregoing information will also be included in Section 1.2.1 of the revised document.

8. Page 9, Section 1.5.2 – Please provide figures for each AOC/SA that show the location of each confirmatory sample included in Table 3.4. It is extremely difficult, based on the information provided, to correlate sample IDs and locations from which the sample was collected.

Response: Figures depicting confirmatory sample locations for AOC 9, AOC 40, and SA 13 will be included in the revised document. Confirmatory samples were composite samples collected within a grid. These figures will be referenced in Sections 1.5.2.1, 1.5.2.2, and 1.5.2.3, respectively. There is no Table 3.4 in the document; it is assumed that the commenter intended to refer to Tables 3, 4, and 5.

9. Page 9, Section 1.5.2 – Please amend Table 3.4 to more clearly present confirmatory soil sample results for each sample location within the DCL and contributor sites (and ensure that these locations are consistent with those presented in the figures generated in response to comment 8).

Response: Tables 3, 4, and 5 will be revised, as necessary, to ensure that the confirmatory sample IDs match the sample IDs shown on the new figures referenced in the response to Comment 8.

10. Page 11, Section 1.5.3 – Please include a copy of the 2006 deed, transferring ownership of DCL contributor sites from Army to Mass Development (and any subsequent deeds) highlighting those specific portions of the deed(s) that incorporate ICs prohibiting residential development of these parcels.

Response: A copy of the deed(s) that transferred ownership of the DCL contributor sites from the Army to Mass Development (and any subsequent deeds) will be included as an appendix in the revised document. The portions of the deed(s) that present ICs prohibiting residential development will be highlighted. This new appendix will be referenced in Section 1.5.3.

11. Page 11, Section 1.5.4 - Please amend this discussion to include the DCL and all contributor sites addressed in the 1999 ROD where ICs were required.

Response: Section 1.5.4 addresses the three DCL contributor sites and inspection reports are provided in Appendix D. No changes are proposed. See the response to Comment 1.

12. Page 11, Section 1.6, Technical Assessment - The entire section must be deleted and replaced with text that adequately and appropriately responds to each of the three questions, for all areas and remedial components included in the 1999 ROD, as required by CERCLA, the NCP, and EPA's 2001 FYR Guidance (see comments 13–15 below).

Response: Agreed. This section will include the three questions for all areas and remedial components included in the 1999 ROD that pertain to the three DCL contributor sites. Since there are no O&M requirements for the DCL contributor sites the discussion will focus on implementation of the ICs. See the responses to Comments 13 through 15.

13. Page 11, Section 1.6, Question A - The current text does not adequately respond to the question identified in EPA's 2001 FYR Guidance (i.e. Is the remedy functioning as intended by the decision documents?). Specifically, the response should be amended to provide details regarding the O&M requirements and associated costs, opportunities for optimization, early indicators of potential remedy problems, and implementation of institutional controls and other measures. The response must address all components of the 1999 remedy (for the DCL and each of the contributor sites) and confirm that the selected remedy is functioning as intended in the 1999 decision document. The discussion should explain steps taking since the 2010 FYR to ensure that ICs remain effective and consistent with current and future land use plans.

Response: Section 1.6, Question A will be revised to address the details requested in the comment for the three DCL contributor sites. Since there are no O&M requirements for the DCL contributor sites the discussion will focus on implementation of the ICs.

14. Page 12, Section 1.6, Question B – The current text does not adequately respond to the question identified in EPA's 2001 FYR Guidance (i.e. Are exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of the remedy selection still valid?) Specifically, the response should be amended to discuss, where/if applicable, changes in exposure pathways, changes in land use, new contaminants and/or contaminant sources, remedy byproducts, changes in standards, newly promulgated standards and TBCs, changes in toxicity and other contaminant characteristics, expected progress towards meeting RAOs and risk recalculation/assessment (as applicable).

Assuming that there have been no changes since the “time of the remedy,” the response to Question B should be changed from “No” to “Yes.” While Army plans to submit an updated baseline risk assessment to support of its position that ICs are not needed at specific DCL contributor sites, this does not impact the protectiveness determination required for the DCL and its contributor sites as part of the Devens 2015 FYR. The Army may add language to the end of the discussion regarding its plans to submit an updated baseline risk assessment and ESD to remove ICs from specific areas addressed in the 1999 remedy but for purposes of the Devens 2015 FYR there have been no changes that support a “No” response.

Response: The response to Question B will be revised to provide a more detailed response for the three DCL contributor sites.

15. Page 12, Section 1.6, Question C - The current text does not adequately respond to the question identified in EPA's 2001 FYR Guidance (i.e. Has any other information come to light that could call into question the protectiveness of the remedy?) Specifically, the response should be amended to discuss, where/if applicable, ecological risks, natural disaster impacts, any other information that could call into question the protectiveness of the remedy.

Response: The response to Question C will be revised to “No” and the following text will replace the existing text.

“No other information has come to light that would call into question the protectiveness of the remedy was noted. No natural disaster impacts occurred at the DCL contributor sites during this review period.”

16. Page 12, Section 1.7, Issues – This section should be should identify issues, if any, pertaining to the existing remedy’s ability to ensure short and long term protectiveness of the remedy as documented in the 1999 ROD. Exhibit 4-3 located on page 4-11 of the FYR Guidance provides a recommended tabular format that should be used to evaluate and identify potential FYR-related issues. While the section may mention Army concerns regarding current land use restrictions and the continued inclusion of the DCL and its contributor sites in the FYR process, the current text is inappropriate for this discussion and should be deleted.

Response: The second and third sentences will be deleted. Section 1.7 will be revised to indicate that no issues have been identified that could impact the short or long-term protectiveness of the remedy for the three DCL contributor sites as documented in the 1999 Record of Decision (ROD). Since no issues were identified, Exhibit 4-2 of the FYR Guidance will not be utilized.

17. Page 12, Section 1.8, Recommendations – This discussion should be amended to identify/discuss “Recommendations and Follow-Up Actions” necessary to address each issue identified in the “Issues” section. As stated in EPA comments on the 2010 and 2015 FYRs, Recommendation should not include activities pertaining to ongoing actions such as routine operations and maintenance activities or proposed changes to the LTM program. While the section may mention Army plans to submit an updated baseline risk assessment and ESD, the current text is inappropriate and should be deleted. In addition, this section should include a table, as shown on page 4-13 of EPA’s 2001 FYR Guidance, that identifies each of the recommendations/follow-up actions and present milestone dates for commencement, review and completion of each action.

Response: Section 1.8 will be revised to indicate that no “Recommendations and Follow-Up Actions” are required for the three DCL contributor sites that are subject to five-year review but that the Army may submit an updated risk assessment to evaluate whether ICs are still needed at the three contributor sites. Since no “Recommendations and Follow-Up Actions” were identified, Exhibit 4-4 of the FYR Guidance will not be utilized.

18. Page 12, Section 1.9, Protectiveness Statement - As requested in EPA comments on the 2010 and 2015 draft FYR Reports, this section must be amended to address the DCL and all of its contributor sites and provide sufficient details to effectively evaluate and confirm the continued protectiveness of the remedy required per the 1999 ROD. The discussion must be expanded to evaluate each component of the selected remedy, identify ROD-specific contaminants of concern and describe how risks, current and/or potential, are being addressed by the selected remedy (i.e., ICs, LUCs, LTM, FYRs, etc.).

Response: Section 1.9 will be revised to evaluate each component of the selected remedy, identify any ROD-specific contaminants of concern and describe how risks, current and/or potential, are being addressed by the selected remedy (i.e., ICs, LUCs, LTM, FYRs, etc.) for the three DCL contributor sites.

19. Page 13, Section 1.11, Next Five Year Review – The text should be revised to reflect that the next FYR for the DCL and its contributor sites will be conducted in 2020. As previously discussed, while EPA acknowledges Army’s desire to remove the existing ICs from several DCL contributor sites, until these sites are deemed suitable for unrestricted use/unlimited exposure (based on EPA and MassDEP concurrence/approval of updated human health and

ecological risk assessments) and existing ICs/LUCs have been formally removed (via an ESD to the 1999 ROD), Army is required to comply with FYR requirements set forth in CERCLA, the NCP and EPA's June 2001, "Comprehensive Five-Year Review Guidance."

Response: Section 1.11 will be revised to indicate that the next FYR for the three DCL contributor sites is scheduled for 2020.

20. Tables – Please add the following tables to the "List of Tables" on page vii and include in the "Tables" section of the FYR Addendum. The table must include applicable information for all components of the 1999 remedy for the DCL and all of its contributor sites.

- "Annual System Operations/O&M Costs"
- "Quarterly Comparison of Groundwater Concentrations"
- "Issues"
- "Recommendations and Follow-Up Actions"

Response: Since there are no requirements for annual system operations/O&M and groundwater monitoring requirements or any identified "Issues", or "Recommendations and Follow-Up Actions" for the three DCL contributor sites, the requested tables are not required.

21. Figures - Please amend the current Figure 1 (or create a new figure) that shows the specific parcels addressed in the 1999 ROD and a clear demarcation of the restricted areas within each. In addition, please include a figure for each AOC/SA, showing the location of each confirmatory sample referenced in Table 3.4, ensuring that it clearly demarcates the "7 of 74" soil sample locations that exceeded applicable residential (i.e. UU/UE) cleanup standards (discussed on page 12, 1st paragraph).

Response: Figure 1 will be revised to show the location of the DCL and seven contributor sites. The parcels addressed in the 1999 ROD for the three DCL contributor sites will be shown on revised Figures 2, 3, and 4. There is no Table 3.4 in the document. It is assumed that the commenter intended to refer to Tables 3, 4, and 5 not Table 3.4.

22. Attachments – Please add the following to the "List of Appendices" on page ix and include them as separate appendices at the end of the FYR Addendum:

- "List of Documents Reviewed" – The list of "References" in Section 1.12 should be amended to include all documents reviewed for the 2015 FYR (including those added to the IC tracking system or other applicable database that collects information about ICs since issuance of the 2010 Devens FYR), as/if applicable, and presented as a separate attachment to the document.
- "Applicable or Relevant and Appropriate Requirements (ARARs)" – A table identifying and updating, if necessary, the ARARs evaluated as part of the remedy selection process should be included in the FYR Addendum;
- "IC Instruments" – A copy(ies) of recently issued deeds/leases (obtained via a title search if warranted) that includes the required use restriction language and legal descriptions of the restricted parcel(s) should be included in the FYR Addendum. The information is required to ensure that the ROD-required ICs have been implemented and are operating as envisioned.

Response: The List of Appendices will be revised to include the requested appendices.

23. Appendix A – The “Draft RA Closure Report” is not required in CERCLA FYRs and should be deleted.

Response: The Draft Remedial Action Closure Report will be removed from the document.

**U.S. ARMY RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY
COMMENTS ON THE
DRAFT FINAL 2015 FIVE YEAR REVIEW REPORT ADDENDUM
DEVENS CONSOLIDATED LANDFILL CONTRIBUTOR SITES AOC 9, 40 AND SA 13
FORMER FORT DEVENS ARMY INSTALLATION, DEVENS, MASSACHUSETTS
FEBRUARY 2018**

The following U.S. Army responses pertain to the U.S. Environmental Protection Agency (EPA) comments, dated 02 February 2018, on the *Draft Final 2015 Five Year Addendum Devens Consolidated Landfill (DCL) Contributor Sites AOC 9, 40 and SA 13* at the Former Fort Devens Army Installation, Devens, Massachusetts, dated October 2017.

Comment 1 – Page vi – Omitted the entire “List of Tables” page. Table 1 is embedded in Section 2.0 and doesn’t need to be referenced here and the confirmation soil sample results (previously provided in Tables 2-4) are unnecessary for determining whether the selected remedy (i.e. excavation of materials from individual remedial areas and consolidation in a new, secure onsite landfill) is still protective of human health and the environment.

Response: The List of Tables and Tables 2, 3, and 4 were removed.

Comment 2 – Page vii, LIST OF ATTACHMENTS, Attachment A Figures – For reasons previously stated, confirmation soil sample locations and sample data should not be included in the DCL FYR Addendum (i.e. they are not needed to determine whether the selected remedy(ies) is protective of human health and the environment).

Response: Figures 2, 3, and 4 were removed.

Comment 3 – Page vii, LIST OF ATTACHMENTS, Attachment A, Figure 1 – Although the focus of the DCL FYR Addendum is on the DCL contributor sites (because they were omitted from the DCLOU discussion in the September 2015 FYR Report), the DCL is part of the selected remedy and, at a minimum, should be identified/referenced in this document (and the reader referred to the relevant section of the September 2015 FYR Report for specific information related thereto).

Response: The DCL is identified on Figure 1. Figure 2 (Devens Consolidation Landfill site map) has been added to the addendum.

The second sentence of Section 3.1 was revised as follows:

“The DCL is discussed in detail in Section 3 the 2015 Devens five-year review report (H&S, 2015) (Attachment A, Figure 2).”

The first sentence of Section 3.4 was revised as follows:

“Details of the DCL feasibility studies and site investigations are discussed in Section 3 of the 2015 Devens five-year review report (H&S, 2015).”

Comment 4 – Page vii, LIST OF ATTACHMENTS, Attachment F – Assuming that inspection records and photos for the DCL were submitted with the 2015 FYR Report, this only pertains to the DCL contributor sites.

Response: The attachment only includes site inspection records and photos of the DCL contributor sites. The Attachment has been renamed “Site Inspections & Photos Documenting Site Conditions at the DCL Contributor Sites”.

Comment 5 Page vii, LIST OF ATTACHMENTS, Attachment H – Consistent with EPA’s guidance for conducting FYRs, these be provided in an Appendix (see below).

Response: The attachment was moved to Appendix A.

Comment 6 – Page vii, LIST OF APPENDICES, Appendix A – Only those comments relevant to the DCL (September 2015 FYR) and/or the DCL contributor sites (as applicable) need be included).

Response: Appendix A only includes comments relevant to the DCL (September 2015 FYR) and/or the DCL contributor sites (as applicable).

Comment 7 – Page xiv, FIVE-YEAR REVIEW SUMMARY FORM, SITE STATUS – As stated in EPA 12/20/17 comment #4, the response to this question is “No” because it refers to the entire Fort Devens Superfund Site; sitewide construction is not yet complete

Response: The response to “Has the site achieved construction completion” was revised to “no”.

Comment 8 – Page xiv – Revise text “Recommendations and Follow-up Actions: This five-year review revealed no issues that affect the protectiveness of the 1999 remedy for the three DCL contributor sites AOC9, AOC 40, and SA 13. However, Army may prepare an updated baseline risk assessment for regulatory review and concurrence to evaluate attainment of UU/UE cleanup goals and support removal of ICs prohibiting residential use of these properties.”

Response: The text was revised per the comment.

Comment 9 – Page 1 – Revise text “KOMAN Government Solutions, LLC, has prepared this Addendum to the 2015 Five-Year Review Report, for Former Fort Devens Army Installation, Base Realignment and Closure (BRAC) Legacy Sites, Devens, Massachusetts (H&S, 2015) to address three Devens Consolidation Landfill (DCL) contributor sites that have Institutional Controls (IC) in place: Area of Contamination (AOC) 9, AOC 40, and Study Area (SA) 13. This Addendum is required because hazardous substances, pollutants or contaminants remain at these sites above levels that allow for unlimited use and unrestricted exposure (UU/UE) but were inadvertently excluded from the DCL evaluation in the 2015 Devens five-year review report (H&S, 2015).”

Response: The text was revised per the comment.

Comment 10 – Page 6, Section 3.2– Open Space/Recreational Areas is inconsistently capitalized through the document; please amend as necessary.

Response: Throughout the document “open space/recreational areas” was revised to be consistently formatted to “Open Space/Recreational areas”.

Comment 11 – Page 9, Section 3.4, 2nd paragraph– Please explain reference to “best value” since this is not a term used to describe a remedy selected in accordance with CERCLA and the NCP.

Response: The term “best value” was in reference to an option of the remedial alternative that was selected. The text was revised to read as follows:

“A ROD, issued in July 1999 [Harding Lawson Associates (HLA), 1999], presented the selected remedial actions for the seven debris disposal areas. The selected remedial alternative (Alternative 4c) required full excavation of AOC 9, AOC 40, SA 13, with on-site consolidation or off-site disposal options. After evaluation of on-site versus off-site disposal options; it was determined that disposal of the remedial debris in an on-site landfill to be built at the former golf course driving range on Patton Road was the “best value” option (S&W, 2000a).”

Comment 12 – Page 12, Section 4.0 – Change the title of Section 4.0 to Regulatory Actions, Section 4.1 to Record of Decision & Remedial Action Objectives (RAOs) and add a Section 4.2 Remedy Description header.

Response: The title of Section 4.0 was changed to Regulatory Actions, Section 4.1 was changed to Record of Decision and Remedial Response Objectives, and a Section 4.2 Remedy Description header was added.

Comment 13 – Page 12, Section 4.1 – This section should be expanded to include a discussion of the ROD and RAOs specific to the contributor sites.

Response: The term “remedial response objectives” was used in the ROD; the term “remedial action objectives” was not used in the ROD. The remedial response objectives were reproduced directly from the ROD and address all the sites covered by the ROD (i.e., SA 6, SA 12, SA 13, AOC 9, AOC 11, AOC 40, and AOC 41). There were not additional remedial response objectives or remedial action objectives for individual sites developed in the ROD. No change to the Addendum text is needed.

Comment 14 – Page 12, Section 4.2, 1st bullet – Please elaborate on the specific tasks/activities associated with “mobilization/demobilization” for each site.

Response: The text was revised to read as follows:

- *“Mobilization/demobilization (Includes backhoes, bulldozers, and dump trucks mobilized/demobilized at AOC 9, AOC 11, AOC 40, and SA 13. Additional sediment removal equipment requiring mobilization at AOC 40 may include an excavator or a clamshell crane, watertight dump trucks, and water storage tanks);”*

Comment 15 – Page 12, Section 4.2, 2nd bullet – Please elaborate on the specific tasks/activities associated with “site preparation” for each site.

Response: The text was revised as follows:

- *“Site preparation (Includes clearing of trees, constructing temporary access roads, and installing silt fences and erosion control measures at AOC 9, AOC 11, AOC 40, and SA 13. At AOC 40, drum removal would be attempted. Construction of a lined basin for dewatering sediment, a lined drum storage area for staging drums, small decontamination pads, a stockpile area approximately 1 acre in size for storage of excavated materials, and a small parking area would be required);”*

Comment 16 – Page 17, Section 4.2, Remedial Action AOC 9, 4th paragraph – Please add S-1 to list of acronyms (with clear description of relevance as a residential cleanup goal).

Response: The text was clarified to read as follows:

“Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan [Stone & Webster (S&W), 2000b] by using PRGs for residential soil and/or Massachusetts Contingency Plan (MCP) S-1 soil standards, whichever was more stringent. Following verification that confirmatory sampling results met the PRGs/MCP S-1 values and the excavation limits had been reached, restoration activities commenced. Restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002).”

Comment 17 – Page 23, Section 6.4 – As recommended in EPA’s 2016 “Five-Year Review Recommended Template” (OLEM -9200.0-89), the discussion of historic, confirmation soil sampling results has been removed since it is irrelevant to the technical assessment evaluation in the proceeding section. Specifically, it recommends that only those data collected since the last

FYR, necessary to answer the three technical assessment question, be included. It also states that “all of the data collected and statistical analyses of these data should not be included, except where additional historical data may be needed to evaluate trends.

Response: All but the first sentence of Section 6.4 was deleted per the comment. The first sentence of Section 6.4 was revised as follows:

“No sampling was conducted at any of the DCL contributor sites since the last five-year review period, because long-term monitoring of the DCL contributor sites is not required under the selected remedial action.”

Comment 18 – Page 28, Section 7.0, Question B, Changes in Standards and To Be Considered – Please identify the specific standards “updated since the signing of the ROD in 1999” and explain why these changes would/do not affect the protectiveness determination.

Response: The text related to DCL construction was inadvertently included.

The second paragraph of Question B was revised as follows:

“Changes in Standards and To Be Considered – As the remedial work has been completed, the ARARs for soil contamination cited in the ROD (Appendix D) have been met. There have been no changes to these ARARs and no new standards or TBCs affecting the protectiveness of the remedy.

Excavation activities at DCL contributor sites AOCs 9, 40, and SA 13 were completed in 2003. Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan (S&W, 2000b) by using PRGs for residential soil and/or MCP S-1 soil standards, whichever was more stringent. PRGs were attained and verified through confirmation sampling. The remedial response objectives for soil specified in the ROD have been achieved. Contaminated soils were removed and placed in the DCL; therefore, changes to soil TBCs do not affect the protectiveness of the implemented remedy.”

Comment 19 – Page 33, Section 9.0, Recommendations and Follow-Up Actions – Revise the text as follows: “There are no recommendations pertaining to the protectiveness of the remedy as specified by the ROD. However, Army may prepare an updated baseline risk assessment for regulatory review and concurrence to evaluate attainment of UU/UE cleanup goals and support removal of ICs prohibiting residential use of these properties.”

Response: The text was revised per the comment.

Comment 20 – Page 37, Section 11.0, Next Review – Revise the last sentence as follows: “ICs will remain in place until an updated human health risk assessment is prepared and submitted to EPA and MassDEP for concurrence/approval that the contributor sites are deemed suitable for UU/UE.”

Response: The text was revised per the comment.

**U.S. ARMY RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY
COMMENTS ON THE
DRAFT FINAL 2015 FIVE YEAR REVIEW REPORT ADDENDUM
DEVENS CONSOLIDATED LANDFILL CONTRIBUTOR SITES AOC 9, 40 AND SA 13
FORMER FORT DEVENS ARMY INSTALLATION, DEVENS, MASSACHUSETTS
FEBRUARY 2018**

The following U.S. Army responses pertain to the U.S. Environmental Protection Agency (EPA) comments concerning the ARARs Table B.1 (Comments 21- 30), dated 02 February 2018, on the *Draft Final 2015 Five Year Addendum Devens Consolidated Landfill (DCL) Contributor Sites AOC 9, 40 and SA 13* at the Former Fort Devens Army Installation, Devens, Massachusetts, dated October 2017.

Comment 21 – Table B.1 Requirement Column, 3rd Row – The discussion of Clean Water Act (CWA) Section 404 doesn't address all requirements of the 401(b) guidelines. Please review and amend, as necessary.

Response: The Army and EPA established the list and discussion of ARARs, as well as the actions to be taken to attain the ARAR requirements, at the time of the ROD. ARARs are normally frozen at the time of ROD signature unless a "new or modified requirement calls into question the protectiveness of the selected remedy." (USEPA, Comprehensive Five-Year Review Guidance, 2001). The ARARs were reviewed and there have been no changes in the ARARs that affect the protectiveness of the remedy. Therefore, no changes to the ARAR tables from the ROD are warranted for the Five-Year Review Report Addendum.

Comment 22 – Table B.1 Regulatory Authority Column, 7th Row – Please explain why MassDEP water quality standards are not listed as applicable. Typically they are applied to all discharges into a State water body.

Response: See response to Comment 21.

Comment 23 – Table B.2 Action to be Taken To Attain Requirement Column, 2nd Row – Please explain why the average concentration is compared to the MCL at AOC 40 for purposes of determining attainment with this ARAR. Typically, the maximum concentration detected is used to determine compliance with drinking water standards.

Response: See response to Comment 21.

Comment 24– Table B.2 Regulatory Authority Column Title – Please explain why MassDEP water quality standards are not listed as applicable. Typically they are applied to all discharges into a State water body.

Response: See response to Comment 21.

Comment 25– Table B.2 Status Column, 1st row – Please explain why the MassDEP groundwater standards are not applicable to discharges groundwater.

Response: See response to Comment 21.

Comment 26– Table B.2 Action to be Taken to Attain Requirement Column, 1st row – Please explain why the average concentration is compared to the MMCL/MCL at AOC 40 for purposes of determining attainment with this ARAR. Typically, the maximum concentration detected is used to determine compliance with drinking water standards.

Response: See response to Comment 21.

Comment 27 – Table B.3 Status Column, 1st row – Please note that where construction (i.e. disturbance) of an area is greater than one acre, the federal construction general storm water permit would be applicable.

Response: See response to Comment 21.

Comment 28 – Table B.3 Requirement Column, 1st row – Please explain why NPDES requirements are not identified as "applicable".

Response: See response to Comment 21.

Comment 29 – Table B.3 Requirement Column Title row – Please explain why MassDEP solid waste management regulations are not identified as "applicable".

Response: See response to Comment 21.

Comment 30 – Table B.3 Regulatory Authority Column, 6th Row – Please explain why State Water Quality Certification Requirements are not identified as "applicable". While the certification process would be applicable because it is procedural, the certification requires a substantive requirement that water quality standards are being met for all discharges.

Response: See response to Comment 21.

**U.S. ARMY RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY
COMMENTS ON THE U.S. ARMY RESPONSES TO THE
USEPA COMMENTS ON THE DRAFT FINAL 2015 FIVE YEAR REVIEW REPORT
ADDENDUM
DEVENS CONSOLIDATED LANDFILL CONTRIBUTOR SITES AOC 9, 40 AND SA 13
FORMER FORT DEVENS ARMY INSTALLATION, DEVENS, MASSACHUSETTS
August 2018**

The following U.S. Army responses pertain to the U.S. Environmental Protection Agency (USEPA) comments, dated 02 May and 13 June 2018 on the U.S. Army responses to USEPA comments dated 02 February and 23 May 2018, on the *Draft Final 2015 Five Year Addendum Devens Consolidated Landfill (DCL) Contributor Sites AOC 9, 40 and SA 13* at the Former Fort Devens Army Installation, Devens, Massachusetts, dated October 2017. Only the comments that required responses are included.

Comment 11 – Page 9, Section 3.4, 2nd paragraph– Please explain reference to “best value” since this is not a term used to describe a remedy selected in accordance with CERCLA and the NCP.

Response: The term “best value” was in reference to an option of the remedial alternative that was selected. The text was revised to read as follows:

“A ROD, issued in July 1999 [Harding Lawson Associates (HLA), 1999], presented the selected remedial actions for the seven debris disposal areas. The selected remedial alternative (Alternative 4c) required full excavation of AOC 9, AOC 40, SA 13, with on-site consolidation or off-site disposal options. After evaluation of on-site versus off-site disposal options; it was determined that disposal of the remedial debris in an on-site landfill to be built at the former golf course driving range on Patton Road was the “best value” option (S&W, 2000a).”

Subsequent Comment - The proposed text is a rearrangement of the original text and as such, remains inadequate in explaining the term “best value.” This is not a phrase used to describe a remedy selected in accordance with CERCLA and the NCP and must be defined if it is to be used in FYR Addendum.

Subsequent Response: The term “best value” was not used to describe the remedy selected or how one remedy was selected. The term “best value” was used during evaluation of the disposal options, which was conducted separately from the remedy selection process and after the ROD was issued. The term “best value” was deleted. The text was revised to read as follows:

“A ROD, issued in July 1999 [Harding Lawson Associates (HLA), 1999], presented the selected remedial actions for the seven debris disposal areas. The selected remedial alternative (Alternative 4c) required full excavation of AOC 9, AOC 40, SA 13, with on-site consolidation or off-site disposal options. In a separate evaluation after the ROD was issued, an evaluation of on-site versus off-site disposal options was conducted and disposal of the remedial debris in an on-site landfill to be built at the former golf course driving range on Patton Road was chosen (S&W, 2000a).”

Comment 12 – Page 12, Section 4.0 – Change the title of Section 4.0 to Regulatory Actions, Section 4.1 to Record of Decision & Remedial Action Objectives (RAOs) and add a Section 4.2 Remedy Description header.

Response: The title of Section 4.0 was changed to Regulatory Actions, Section 4.1 was changed to Record of Decision and Remedial Response Objectives, and a Section 4.2 Remedy Description header was added.

Subsequent Comment - Please see comment below.

Subsequent Response – Please clarify which comment below and if it was an original comment please clarify objection to provided response.

Comment 13 – Page 12, Section 4.1 – This section should be expanded to include a discussion of the ROD and RAOs specific to the contributor sites.

Response: The term “remedial response objectives” was used in the ROD; the term “remedial action objectives” was not used in the ROD. The remedial response objectives were reproduced directly from the ROD and address all the sites covered by the ROD (i.e., SA 6, SA 12, SA 13, AOC 9, AOC 11, AOC 40, and AOC 41). There were not additional remedial response objectives or remedial action objectives for individual sites developed in the ROD. No change to the Addendum text is needed.

Comment 16 – Page 17, Section 4.2, Remedial Action AOC 9, 4th paragraph – Please add S-1 to list of acronyms (with clear description of relevance as a residential cleanup goal).

Response: The text was clarified to read as follows:

“Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan [Stone & Webster (S&W), 2000b] by using PRGs for residential soil and/or Massachusetts Contingency Plan (MCP) S-1 soil standards, whichever was more stringent. Following verification that confirmatory sampling results met the PRGs/MCP S-1 values and the excavation limits had been reached, restoration activities commenced. Restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002).”

Subsequent Comment – Revise the text as follows:

“Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan [Stone & Webster (S&W), 2000b] by using PRGs for residential soil and/or Massachusetts Contingency Plan (MCP) S-1 soil standards, whichever was more stringent. Following verification that ~~confirmatory sampling results met the PRGs/MCP S-1 values and the~~ excavation limits had been reached, restoration activities commenced. Restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002).”

Subsequent Response: The text was revised per the comment.

Comment 17 – Page 23, Section 6.4 – As recommended in EPA’s 2016 “Five-Year Review Recommended Template” (OLEM -9200.0-89), the discussion of historic, confirmation soil sampling results has been removed since it is irrelevant to the technical assessment evaluation in the proceeding section. Specifically, it recommends that only those data collected since the last FYR, necessary to answer the three technical assessment question, be included. It also states that “all of the data collected and statistical analyses of these data should not be included, except where additional historical data may be needed to evaluate trends.

Response: All but the first sentence of Section 6.4 was deleted per the comment. The first sentence of Section 6.4 was revised as follows:

“No sampling was conducted at any of the DCL contributor sites since the last five-year review period, because long-term monitoring of the DCL contributor sites is not required under the selected remedial action.”

Subsequent Comment - The DCL contributors sites were not evaluated in the last (2010) FYR. Revise the text as follows:

“No sampling was conducted at any of the DCL contributor sites ~~since the last five-year review period~~, because long-term monitoring of the DCL contributor sites is not required under the selected remedial action.”

Subsequent Response: The text was revised per the comment.

Comment 18 – Page 28, Section 7.0, Question B, Changes in Standards and To Be Considered

– Please identify the specific standards “updated since the signing of the ROD in 1999” and explain why these changes would/do not affect the protectiveness determination.

Response: The text related to DCL construction was inadvertently included.

The second paragraph of Question B was revised as follows:

“Changes in Standards and To Be Considered – As the remedial work has been completed, the ARARs for soil contamination cited in the ROD (Appendix D) have been met. There have been no changes to these ARARs and no new standards or TBCs affecting the protectiveness of the remedy.

Excavation activities at DCL contributor sites AOCs 9, 40, and SA 13 were completed in 2003. Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan (S&W, 2000b) by using PRGs for residential soil and/or MCP S-1 soil standards, whichever was more stringent. PRGs were attained and verified through confirmation sampling. The remedial response objectives for soil specified in the ROD have been achieved. Contaminated soils were removed and placed in the DCL; therefore, changes to soil TBCs do not affect the protectiveness of the implemented remedy.”

Subsequent Comment: With respect to the first paragraph of the suggested text revision, EPA is unable to comment on this proposed language until issues/comments on the ARARs tables have been successfully resolved by EPA and Army legal staff. As such, EPA recommends that Army refrain from releasing the final DCL FYR Addendum until the materials in Appendix D have been approved/finalized.

With respect to the second paragraph of the suggested text revision, the entire paragraph should be deleted. The proposed language is incorrect and doesn’t accurately respond to technical Question B. Institutional Controls (IC) were required for AOCs 9 and 40 and Study Area (SA) 13 upon completion of excavation activities because residential soil PRGs and/or MCP S-1 soil standards (levels that allow for unlimited use and unrestricted exposure (UU/UE)) were not attained (and verified through confirmation sampling).

Subsequent Response: Comment noted with respect to the subsequent comment on the first paragraph.

With respect to the subsequent comment on the second paragraph, the text was revised per the comment.

Comment 26– Table B.2 Action to be Taken to Attain Requirement Column, 1st row – Please explain why the average concentration is compared to the MMCL/MCL at AOC 40 for purposes of determining attainment with this ARAR. Typically, the maximum concentration detected is used to determine compliance with drinking water standards.

Response: See response to Comment 21.

Subsequent Comment - EPA reiterates its original comment, which unlike the others, does not request a modification to ARARs. Rather it requests Army's explanation for why implementation of the ARAR occurs in a particular way. More specifically, EPA requests that Army explain "why the average concentration is compared to the MMCL/MCL at AOC 40 for purposes of determining attainment with this ARAR." The explanation is required to ensure that the remedy is protective.

Floodplain Regulations - 44 C.F.R. 9 should be included, as well as a note that it is an interpretation of Executive Order 11988. (4 C.F.R. 6 is the old regulation that dealt with Floodplain management and has since been rescinded). The Five-Year Review must address the change in the regulation and whether the remedy continues to be protective. See the table below for an example of how the current Floodplain Regulations could be included as ARARs (changes from old ARARs table highlighted in red):

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
Federal	Floodplains	Floodplain Management, 44 C.F.R. 9, Executive Order 11988	Applicable AOC 9 AOC 11 AOC 40	Federal Emergency Management Agency regulations that set forth the policy, procedure and responsibilities to implement and enforce Executive Order 11988, Floodplain Management.	Drum removal and hot-spot sediment removal will be designed to minimize alteration/destruction of floodplain area. If this alternative is chosen, wetlands adversely affected by remedial action will be restored to the extent necessary.
	Wetlands	Protection of Wetlands, 44 C.F.R. 9, Executive Order 11990	Applicable AOC 9 AOC 11 AOC 40	Under this Order, as implemented through 44 C.F.R. 9, federal agencies are required to minimize the destruction, loss, or degradation of wetlands, and preserve and enhance natural and beneficial values of wetlands. If remediation is required within wetland areas, and no practical alternative exists, potential harm must be minimized and action taken to restore natural and beneficial values.	Drum removal and hot-spot sediment removal will be designed to minimize alteration/destruction of floodplain area. If this alternative is chosen, wetlands adversely affected by remedial action will be restored to the extent necessary.

At the time of ROD issuance in July 1999, waste left in place within a floodplain only had to be floodproofed up to the 100-year storm elevation. Since current CERCLA remedies in Region 1 now require that waste left in place be floodproofed up to the 500-year flood elevation, Army should evaluate any DCL contributor sites where wastes remain to determine whether they are floodproofed sufficiently to prevent a release < a 500-year flood/storm event.

Because the remaining EPA comments relate to previously selected and finalized ARARs, and do not involve standards that have changed, EPA accepts Army's responses but requests that these comments (and all other EPA comments issued for the 2015 FYR Addendum for DCL Contributor Sites) be included in the final FYR Addendum in an appendix entitled "Regulatory Comments Received on the Draft DCL - 2015 5-Year Review Addendum DCL Contributor Sites".

Subsequent Response: Regarding the comment on "why the average concentration is compared to the MMCL/MCL at AOC 40 for purposes of determining attainment with this ARAR." Review of the HHRA in RI Addendum Report indicates that both the maximum and average groundwater concentrations were compared to the MCLs. The comparisons to MCLs should be evaluated in the context of the entire risk assessment (which concluded that exposure to groundwater downgradient of Cold Spring Brook Landfill will not result in unacceptable risk).

The first paragraph of Section 7.0, Question B, Changes in Standards To Be Considered" will be revised as follows: "Although changes in these standards do not affect current remedy protectiveness, amended floodplain management and wetland protection regulations require that Army monitor / maintain rip-rap and soil covers over any wastes left in place within a floodplain up to the 500-year storm elevation (versus the 100-year storm elevation required at the time of ROD issuance in 1999). These new regulations were enacted to ensure sufficient protection against a release of remaining waste during a flood/storm event."

The following text will be added at the beginning of Section 9.0: "In accordance with amended floodplain management and wetland protection regulations, Army will ensure protection of wastes left in place within a floodplain by monitoring, managing and repairing, if necessary, rip-rap and/or soil covers up to the 500-year flood elevation."

The various responses to regulatory comments will be included in Appendix A.

**U.S. ARMY RESPONSES TO
U.S. ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE
DRAFT FINAL 2015 FIVE YEAR REVIEW REPORT ADDENDUM
DEVENS CONSOLIDATED LANDFILL CONTRIBUTOR SITES AOC 9, 40 AND SA 13
FORMER FORT DEVENS ARMY INSTALLATION, DEVENS, MASSACHUSETTS
28 September 2018**

The following U.S. Army (Army) responses pertain to the U.S. Environmental Protection Agency (USEPA) comments, dated 20 August 2018, on the Army's 1 August 2018 response document. The August responses pertained to USEPA's comments dated 2 May and 13 June 2018 on the Army's previous responses to USEPA comments dated 2 February and 23 May 2018, on the *Draft Final 2015 Five Year Addendum Devens Consolidated Landfill (DCL) Contributor Sites AOC 9, 40 and SA 13* at the Former Fort Devens Army Installation, Devens, Massachusetts, dated October 2017. Only the follow-on USEPA comments that required additional responses are included herein. The related original comments are provided for reference.

EPA Follow-On Comment (August 20, 2018) – Page xi, Five-Year Review Summary Form – Please reformat the page such that the “Issues” discussion precedes the “Recommendations and Follow-Up Actions” discussion at the bottom of the page. Also, please change the entry for “Due Date” (at the bottom of the summary form) to “September 26, 2000 (*and every five years thereafter*).”

Response: The final version of the page will be formatted such that the “Issues” discussion precedes the “Recommendations and Follow-Up Actions” at the bottom of the page. Due to constraints of the red-line strike out operations, the final formatting will not be visible in the red-line strike out version of the text.

The entry for “Due Date” has been changed to “September 26, 2000 (*and every five years thereafter*).”

EPA Follow-On Comment (August 20, 2018) – Page 5, Section 3.1 – For clarity, please move “(Attachment A, Figure 2)” from the end of the second sentence to the beginning of the sentence, after “The DCL...” (as written, the text suggests that Figure 2 is in Attachment A of the September 2015 FYR).

Response: The text was revised per the comment.

Comment 13 (February 5, 2018) – Page 12, Section 4.1 – This section should be expanded to include a discussion of the ROD and RAOs specific to the contributor sites.

Response: The term “remedial response objectives” was used in the ROD; the term “remedial action objectives” was not used in the ROD. The remedial response objectives were reproduced directly from the ROD and address all the sites covered by the ROD (i.e., SA 6, SA 12, SA 13, AOC 9, AOC 11, AOC 40, and AOC 41). There were not additional remedial response objectives or remedial action objectives for individual sites developed in the ROD. No change to the Addendum text is needed.

EPA Follow-On (August 20, 2018): Acceptance of response contingent upon deletion of “landfill” (since the RROs “address all sites covered by the ROD (i.e., SA 6, SA 12, SA 13, AOC 9, AOC 11, AOC 40, and AOC 41)”).

Response: The first sentence of Section 4.1 was revised as follows:

“The remedial response objectives as defined by the 1999 ROD were:...”

Comment 16 (February 5, 2018) – Page 17, Section 4.2, Remedial Action AOC 9, 4th paragraph – Please add S-1 to list of acronyms (with clear description of relevance as a residential cleanup goal).

Response: The text was clarified to read as follows:

“Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan [Stone & Webster (S&W), 2000b] by using PRGs for residential soil and/or Massachusetts Contingency Plan (MCP) S-1 soil standards, whichever was more stringent. Following verification that confirmatory sampling results met the PRGs/MCP S-1 values and the excavation limits had been reached, restoration activities commenced. Restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002).”

Subsequent Comment (June 13, 2018)– Revise the text as follows:

“Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan [Stone & Webster (S&W), 2000b] by using PRGs for residential soil and/or Massachusetts Contingency Plan (MCP) S-1 soil standards, whichever was more stringent. Following verification that ~~confirmatory sampling results met the PRGs/MCP S-1 values and the~~ excavation limits had been reached, restoration activities commenced. Restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002).”

Subsequent Response: The text was revised per the comment.

EPA Follow-On (August 20, 2018): Acceptance of response contingent upon identification/inclusion of the specific PRGs for residential soil and MCP S-1 soil standards (as requested in EPA’s February 2, 2018 comments) and replacement of existing text in the second to last paragraphs for AOC 40 and SA 13 with the revised text (in green) above. Since available confirmatory sample data did not verify attainment of PRGs (for residential use) or MCP S-1 soil standards, language pertaining to confirmatory results and attainment of PRGs/S-1 standards must be deleted. Army must prepare an updated baseline risk assessment for regulatory review and concurrence to confirm attainment of UU/UE (residential) cleanup standards (and support removal of existing ICs).

Response: The text in the second to last paragraphs for AOC 40 and SA 13 were revised per the comment. The PRGs were added as Appendix E and a reference to Appendix E was added to Section 4.3.

Comment 17 – Page 23, Section 6.4 – As recommended in EPA’s 2016 “Five-Year Review Recommended Template” (OLEM -9200.0-89), the discussion of historic, confirmation soil sampling results has been removed since it is irrelevant to the technical assessment evaluation in the proceeding section. Specifically, it recommends that only those data collected since the last FYR, necessary to answer the three technical assessment question, be included. It also states that “all of the data collected and statistical analyses of these data should not be included, except where additional historical data may be needed to evaluate trends.

Response: All but the first sentence of Section 6.4 was deleted per the comment. The first sentence of Section 6.4 was revised as follows:

“No sampling was conducted at any of the DCL contributor sites since the last five-year review period, because long-term monitoring of the DCL contributor sites is not required under the selected remedial action.”

Subsequent Comment - The DCL contributor sites were not evaluated in the last (2010) FYR. Revise the text as follows:

“No sampling was conducted at any of the DCL contributor sites ~~since the last five-year review period~~, because long-term monitoring of the DCL contributor sites is not required under the selected remedial action.”

Subsequent Response: The text was revised per the comment.

EPA Follow-On: Response accepted.

EPA Follow-On Comment (August 20, 2018) – Section 6.6 – Please insert “, including photos documenting site conditions,” after “Site Inspection reports” in the last sentence.

Response: The text was revised per the comment.

Comment 18 (February 5, 2018) – Page 28, Section 7.0, Question B, Changes in Standards and To Be Considered

– Please identify the specific standards “updated since the signing of the ROD in 1999” and explain why these changes would/do not affect the protectiveness determination.

Response: The text related to DCL construction was inadvertently included. The second paragraph of Question B was revised as follows:

“Changes in Standards and To Be Considered – As the remedial work has been completed, the ARARs for soil contamination cited in the ROD (Appendix D) have been met. There have been no changes to these ARARs and no new standards or TBCs affecting the protectiveness of the remedy.

Excavation activities at DCL contributor sites AOCs 9, 40, and SA 13 were completed in 2003. Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan (S&W, 2000b) by using PRGs for residential soil and/or MCP S-1 soil standards, whichever was more stringent. PRGs were attained and verified through confirmation sampling. The remedial response objectives for soil specified in the ROD have been achieved. Contaminated soils were removed and placed in the DCL; therefore, changes to soil TBCs do not affect the protectiveness of the implemented remedy.”

Subsequent Comment (June 13, 2008): With respect to the first paragraph of the suggested text revision, EPA is unable to comment on this proposed language until issues/comments on the ARARs tables have been successfully resolved by EPA and Army legal staff. As such, EPA recommends that Army refrain from releasing the final DCL FYR Addendum until the materials in Appendix D have been approved/finalized.

With respect to the second paragraph of the suggested text revision, the entire paragraph should be deleted. The proposed language is incorrect and doesn’t accurately respond to technical Question B. Institutional Controls (IC) were required for AOCs 9 and 40 and Study Area (SA) 13 upon completion of excavation activities because residential soil PRGs and/or MCP S-1 soil standards (levels that allow for unlimited use and unrestricted exposure (UU/UE)) were not attained (and verified through confirmation sampling).

Subsequent Response: Comment noted with respect to the subsequent comment on the first paragraph.

With respect to the subsequent comment on the second paragraph, the text was revised per the comment.

EPA Follow-On (August 20, 2018): Response unacceptable for the reasons outlined below.

- a) The deleted language (in the now third paragraph) should be reinserted in the document. Specifically, the first paragraph after “Change in Standards and To Be Considered” should read, “As part of this FYR Addendum, ARARs for the sites presented in the 1999 ROD (Appendix D) were reviewed to identify potential changes, if any, to standards and/or regulatory requirements since issuance of the ROD that could affect current remedy protectiveness.”
- b) As first requested in EPA’s February 2, 2018 comments, this section must identify, *by name and citation*, any ARAR cited in the 1999 ROD that has changed since ROD issuance and/or “new” (post-1999) ARAR (i.e. regulation, guidance, TBC, etc.) that would appear in an ARARs table for the same remedy if the ROD was issued today (in 2018). While EPA is aware of Army’s reluctance to make changes/updates to the ARARs tables as they appeared in the 1999 ROD, it must, at a minimum, identify any such changes/additions and state whether those changes/additions affect current remedy protectiveness.
- c) Although EPA appreciates Army’s inclusion of the requested text regarding the amended floodplain management and wetland protection regulations, this language should proceed the applicable regulatory citations, “44 C.F.R.9, Executive Order 11988” (Floodplain Management) and “44 C.F.R.9, Executive Order 11990” (Protection of Wetlands).
- d) It is still unclear why Army has excluded a discussion of the “standards relative to landfill remediation and construction” that have been mentioned in every prior draft submission. For reasons previously discussed, even if they do not affect the protectiveness of the remedy, they need to be identified and included in this discussion.
- e) For reasons discussed in Comment 16 above, please delete the highlighted portion of Army’s proposed, revised text (see above).
- f) EPA requests that in lieu of making formal changes to the 1999 ARARs table that any changed, added, or updated ARAR identified in this section be included in a “List of Amended ARARs That Do Not Affect Current Remedy Protectiveness” to be included as an attachment the ARARs tables in Appendix D (as maybe “Appendix D-1”) or included in a separate Appendix E. This will give personnel working on subsequent FYRs review a “head start” in identifying and evaluating post-ROD ARARs changes.

Response:

- a) The ARARs from the ROD were included as Appendix D-1. The following text was inserted as the first paragraph after “Change in Standards and To Be Considered”:

“As part of this Addendum, ARARs for the sites presented in the ROD (Appendix D-1) were reviewed to identify potential changes, if

any, to standards and/or regulatory requirements since issuance of the ROD that could affect current remedy protectiveness.”

- b) The ARARs revised since the ROD were included as Appendix D-2.
- c) The following text was inserted at the end of the second paragraph:
“The new regulations are 44 CFR 9, Executive Order 11988 (Floodplain Management) and 44 CFR 9, Executive Order 11990 (Protection of Wetlands). The new regulations are summarized in Appendix D-2.”
- d) As indicated in the original response, the text related to DCL construction was inadvertently included. The Addendum is focused on the contributor sites, the DCL remedial action and ARARs related to construction of the DCL is addressed the 2015 Five-Year Review Report.
- e) The EPA comment indicates the following text should be deleted from Section 7.0: “PRGs were attained and verified through confirmation sampling. The remedial response objectives for soil specified in the ROD have been achieved.” The entire paragraph was deleted per EPA’s specific direction in the subsequent comment to response to Comment 18.
- f) The ARARs revised since the ROD was signed as provided by EPA in the June 13, 2018 comment in the response Comment 26 was included as Appendix D-2.

EPA Follow-On Comment (August 20, 2018): Section 7.0, Question B, Changes in Standards and To Be Considered, Changes in Toxicity and Other Contaminant Characteristics and Changes in Risk Assessment Methods – For reasons previously discussed, current statements regarding the extent (i.e. thoroughness) of soil excavation activities at the DCL contributor sites and effect of changes in standards and exposure parameters on remedy protectiveness are incorrect. Because residential soil PRGs and/or MCP S-1 soil standards (levels that allow for unlimited use and unrestricted exposure (UU/UE)) were *not* attained (and verified through confirmation sampling), all post-ROD changes in toxicity standards and/or risk assessment methodology, such as the changes in determining dermal contact exposures noted in the second to last paragraph of this section, must be identified and evaluated in the 2015 FYR Report. Please amend these sections to identify these specific changes and indicate whether these changes affect current remedy protectiveness.

Response: As indicated in the text, even though methods for reevaluating dermal contact exposure have changed, including some exposure assumptions and toxicity values, residential exposure has been eliminated through prevention of residential development. Therefore, the risk assessment methodology changes do not affect the protectiveness of the remedy.

It should be noted that the PRGs were substantially met during the remedial action as the majority of the confirmatory samples did not exceed the benchmarks. There were no exceedences of PRGs at SA 13, only 1 minor exceedance out of 32 samples at AOC 9 (only for one compound, benzo(a)pyrene, at 0.31 mg/kg compared to a PRG of 0.062 mg/kg), and only 3 out of 23 samples at AOC 40.

Comment 26 (February 5, 2018)– Table B.2 Action to be Taken to Attain Requirement Column, 1st row – Please explain why the average concentration is compared to the MMCL/MCL at AOC 40 for purposes of determining attainment with this ARAR. Typically, the maximum concentration detected is used to determine compliance with drinking water standards.

Response: See response to Comment 21.

Subsequent Comment (June 13, 2018) – EPA reiterates its original comment, which unlike the others, does not request a modification to ARARs. Rather it requests Army's explanation for why implementation of the ARAR occurs in a particular way. More specifically, EPA requests that Army explain "why the average concentration is compared to the MMCL/MCL at AOC 40 for purposes of determining attainment with this ARAR." The explanation is required to ensure that the remedy is protective.

Floodplain Regulations - 44 C.F.R. 9 should be included, as well as a note that it is an interpretation of Executive Order 11988. (4 C.F.R. 6 is the old regulation that dealt with Floodplain management and has since been rescinded). The Five-Year Review must address the change in the regulation and whether the remedy continues to be protective. See the table below for an example of how the current Floodplain Regulations could be included as ARARs (changes from old ARARs table highlighted in red):

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
Federal	Floodplains	Floodplain Management, 44 C.F.R. 9, Executive Order 11988	Applicable AOC 9 AOC 11 AOC 40	Federal Emergency Management Agency regulations that set forth the policy, procedure and responsibilities to implement and enforce Executive Order 11988, Floodplain Management.	Drum removal and hot-spot sediment removal will be designed to minimize alteration/destruction of floodplain area. If this alternative is chosen, wetlands adversely affected by remedial action will be restored to the extent necessary.
	Wetlands	Protection of Wetlands, 44 C.F.R. 9, Executive Order 11990	Applicable AOC 9 AOC 11 AOC 40	Under this Order, as implemented through 44 C.F.R. 9, federal agencies are required to minimize the destruction, loss, or degradation of wetlands, and preserve and enhance natural and beneficial values of wetlands. If remediation is required within wetland areas, and no practical alternative exists, potential harm must be minimized and action taken to restore natural and beneficial values.	Drum removal and hot-spot sediment removal will be designed to minimize alteration/destruction of floodplain area. If this alternative is chosen, wetlands adversely affected by remedial action will be restored to the extent necessary.

At the time of ROD issuance in July 1999, waste left in place within a floodplain only had to be floodproofed up to the 100-year storm elevation. Since current CERCLA remedies in Region 1 now require that waste left in place be floodproofed up to the 500-year flood elevation, Army should evaluate any DCL contributor sites where wastes remain to determine whether they are floodproofed sufficiently to prevent a release < a 500-year flood/storm event.

Because the remaining EPA comments relate to previously selected and finalized ARARs, and do not involve standards that have changed, EPA accepts Army's responses but requests that these comments (and all other EPA comments issued for the 2015 FYR Addendum for DCL Contributor Sites) be included in the final FYR Addendum in an appendix entitled "Regulatory Comments Received on the Draft DCL - 2015 5-Year Review Addendum DCL Contributor Sites".

Subsequent Response: Regarding the comment on "why the average concentration is compared to the MMCL/MCL at AOC 40 for purposes of determining attainment with this ARAR." Review of the HHRA in RI Addendum Report indicates that both the maximum and average groundwater concentrations were compared to the MCLs. The comparisons to MCLs should be evaluated in the context of the entire risk assessment (which concluded that exposure to groundwater downgradient of Cold Spring Brook Landfill will not result in unacceptable risk).

The first paragraph of Section 7.0, Question B, Changes in Standards To Be Considered" will be revised as follows: *"Although changes in these standards do not affect current remedy protectiveness, amended floodplain management and wetland protection regulations require that Army monitor / maintain rip-rap and soil covers over any wastes left in place within a floodplain up to the 500-year storm elevation (versus the 100-year storm elevation required at the time of ROD issuance in 1999). These new regulations were enacted to ensure sufficient protection against a release of remaining waste during a flood/storm event."*

The following text will be added at the beginning of Section 9.0: *"In accordance with amended floodplain management and wetland protection regulations, Army will ensure protection of wastes left in place within a floodplain by monitoring, managing and repairing, if necessary, rip- rap and/or soil covers up to the 500-year flood elevation."*

The various responses to regulatory comments will be included in Appendix A.

EPA Follow-On (August 20, 2018): Response unacceptable. While the information provided in Army's response is helpful, further clarification is warranted. Specifically, Army states that both the maximum and average groundwater concentrations were compared to MCLs, but this does not necessarily equate to compliance with the ARAR. The ARAR (in Table B.2) requires that *any exceedance* of the MCL means non-compliance with the ARAR. Thus, if Army based its determination of "no unacceptable risk" on the *average* (rather than the maximum) values, then this could be problematic. Even if the average does not exceed the MCL, the maximum may exceed the MCL (which would result in noncompliance and a lack of protectiveness). Please clarify that the risk assessment not only compared maximum groundwater concentrations to the MCLs, but also relied on these comparisons to ensure that there were no exceedances of the MCL. If both the averages and maximums were compared (as Army states above), but the average concentrations were the only values applied to determine risk acceptability, then there needs to be more discussion of the maximum values and whether they exceeded the MCLs. Hopefully, this is a non-issue, but Army (and EPA) must confirm that no maximum groundwater concentrations exceeded the MCLs to conclude that the remedy is protective.

Response: As indicated in the ROD for AOC 40, even though bis(2-ethylhexyl)phthalate (BEHP) was detected at elevated concentrations and resulted in risks in groundwater above the EPA point of departure, it is possible BEHP concentrations reported in AOC 40 samples resulted from laboratory contamination. The risk assessment results were evaluated and even though the risks were above EPA guidance values, because there is not residential groundwater exposure under current land use conditions there is no carcinogenic risk and the noncancer risks were overestimated. Because there was no current or potential future risk above the EPA point of departure to groundwater, the remedy does not include a groundwater monitoring component to assess if the remedy is protective of groundwater through attainment of federal or state drinking water regulations. The remedy is protective of groundwater through removal of the potential, future threat of contaminant release to area groundwater.



APPENDIX B

**Institutional Control Instruments – Quit Claim Deed-Parcels A2A,
A4, and A8 (dated 03/07/2006)**

Quitclaim Deed

Parcels A2A, A4 & A8



2006 00032800

Bk: 38514 Pg: 121 Doc: DEED
Page: 1 of 48 03/07/2008 10:32 AM

WHEREAS, pursuant to the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510, as amended, and codified at 10 U.S.C. 2687, note) ("BRAC"), the United States of America, acting by and through the Department of the Army (referred to hereinafter as the "Army" or "Grantor"), closed the military installation located at Fort Devens Massachusetts ("Fort Devens"), and has made a final disposal decision with respect thereto; and

WHEREAS, pursuant to Chapter 498 of the Massachusetts Acts of 1993 as amended, the Massachusetts Development Finance Agency (referred to hereinafter as "MassDevelopment" or "Grantee"), successor in interest to the Government Land Bank under Chapter 289 of the Acts of 1998, notice of which was recorded on October 7, 1998, with the Worcester District Registry of Deeds in **Book 20505, Page 279**, and with the Middlesex County, Southern District, Registry of Deeds in **Book 29188, Page 568**, was granted the exclusive authority to oversee and implement the civilian reuse of Fort Devens in accordance with a locally approved reuse plan and bylaws and designated as the Local Redevelopment Authority under BRAC; and

WHEREAS, pursuant to a Memorandum of Agreement ("MOA") entered into between the Grantor and the Grantee on May 9, 1996, as amended from time to time, the Grantor transferred certain portions of Fort Devens to the Grantee by quitclaim deed dated May 9, 1996, recorded with the Middlesex County, Southern District, Registry of Deeds in **Book 26317, Page 003**, and with the Worcester District Registry of Deeds in **Book 17907, Page 001**, and leased certain other portions of Fort Devens (the "Leased Parcel") to the Grantee through a Lease in Furtherance of Conveyance ("Lease"), a Notice of Lease dated May 9, 1996 (the "Notice of Lease"), recorded with the Middlesex County, Southern District, Registry of Deeds in **Book 26340, Page 168**, and with the Worcester District Registry of Deeds in **Book 17922, Page 223**, pending the completion of certain environmental clean-up activities on the Leased Parcel by the Grantor; and

WHEREAS, the terms of the MOA provide, among other things, that upon the completion of the environmental clean-up of any of the Leased Parcel pursuant to: applicable law, the approval of a Finding of Suitability of Transfer ("FOST") by the Grantor, the United States Environmental Protection Agency ("EPA") and the Massachusetts Department of Environmental Protection ("DEP"); and, in accordance with the Department of Defense policy guidance, the Grantor will convey said Leased Parcel(s) to the Grantee for consideration of less than one hundred dollars (\$100.00);

WHEREAS, the FOST for Leased Parcels A2A, A4 and A8, said parcels being identified on a plan entitled "Plan of Land Conveyed to the Government Land Bank by the Secretary of the Army, Ayer, Harvard and Shirley MA" (the "Leased Parcel Plan") dated May 9, 1996, recorded with the Worcester District Registry of Deeds in **Plan Book 703, Plan 112**, and with the Middlesex County, Southern District, Registry of Deeds, as

North Side of Patten Road, Harvard, Massachusetts
and Western side of Lake George Street, Harvard, MA

Plan 500 of 1996, was approved by the Grantor in accordance with the applicable Department of Defense policy guidelines, the EPA and DEP.

WHEREAS, the Grantee has requested and the Grantor has agreed to convey Leased Parcels A2A, A4 and A8 to the Grantee.

KNOW ALL MEN BY THESE PRESENTS: that the UNITED STATES OF AMERICA, acting by and through the DEPUTY ASSISTANT SECRETARY OF THE ARMY (Installations and Housing) (hereinafter "Grantor"), pursuant to a delegation of authority from the Secretary of the Army, under and pursuant to the Defense Base Closure and Realignment Act of 1990, Public Law 101-510, as amended, codified at 10 U.S.C. § 2687 note ("BRAC") and the Federal Property and Administrative Service Act of 1949, as amended, for the utilization and disposal of excess and surplus property at closed and realigned military installations, for consideration paid of less than \$100.00 the receipt and sufficiency of which is hereby acknowledged, does hereby grant, remise, release, and forever quitclaim unto the Massachusetts Development Finance Agency, their successors and assigns, (hereinafter "Grantee"), a Massachusetts body politic and corporate created by Chapter 23G of the Massachusetts General Laws and successor in interest to the Government Land Bank, having a principal place of business located at 160 Federal Street, 7th Floor, Boston, Massachusetts 02110, and designated as the Local Redevelopment Authority under BRAC, all its right, title, and interest in and to: Leased Parcel A2A, consisting of 18.5± acres, of land located in the Devens Regional Enterprise Zone, Town of Shirley, Middlesex County, Commonwealth of Massachusetts; Leased Parcel A4, consisting of 16± acres, of land located in the Devens Regional Enterprise Zone, Town of Harvard, Worcester County, Commonwealth of Massachusetts; and Leased Parcel A8, consisting of 9.7± acres, of land located in the Devens Regional Enterprise Zone, Town of Harvard, Worcester County, Commonwealth of Massachusetts (hereinafter all three Parcels shall be called the "Property"), and shown on Leased Parcel Plan and more particularly described in Exhibit A, attached hereto and made a part hereof, and in the Notice of Lease. The Grantor and the Grantee hereby release any and all rights in the Property under said Notice of Lease, and under the Lease referenced therein, it being agreed that the Lease shall remain in full force and effect with regard to the other Leased Parcels not being conveyed hereunder.

The Property includes:

1. all buildings, facilities, utility systems, utilities, utility lines and poles, conduits, infrastructure, roadways, railroads, bridges, and improvements thereon and appurtenances thereto, if any;
2. all easements, reservations, and other rights appurtenant thereto;
3. all hereditaments and tenements therein and reversions, remainders, issues, profits, and other rights belonging or related thereto; and
4. all mineral rights.

The legal description of the Property, attached hereto as Exhibit A, has been prepared by the Grantee and the Grantee shall be responsible for the accuracy of the description of the Property conveyed herein and shall indemnify and hold the Grantor harmless from any and all liability resulting from any inaccuracy in the description.

I. CERCLA COVENANTS AND NOTICE

Pursuant to Section 120(h)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. § 9601 et seq. ("CERCLA"):

A. The Grantor hereby notifies the Grantee of the storage, release, and disposal of hazardous substances, as defined under Section 101 of CERCLA, on the Property. Available information regarding the type, quantity, and location of such hazardous substances and actions taken with regard to the Property is set forth in the Finding of Suitability to Transfer ("FOST"), attached hereto as Exhibit B. The information regarding the storage, release, and disposal of any hazardous substances on the Property indicates that there is "No Significant Risk" to human health and the environment and a Class A-2 Response Action Outcome has been achieved for the Property, as defined under the Massachusetts Contingency Plan (310 CMR 40.0000).

B. The Grantor hereby covenants that:

1. all remedial action necessary to protect human health and the environment with respect to any such hazardous substances remaining on the Property has been taken prior to the date of conveyance hereunder; and

2. any additional remedial action found to be necessary with regard to such hazardous substances after the date of the conveyance that resulted from past activities of the Grantor shall be conducted by the Grantor except as otherwise provided under Section 120(h) of CERCLA. Except as provided under Section 120(h) of CERCLA and this Quitclaim Deed, the Grantor assumes no liability for additional response action or corrective action, found to be necessary after the date of transfer, in any case in which the person or entity to whom the Property is transferred, or other non-Army entities, is identified as the party responsible for contamination of the Property.

The Grantee shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the provisions of this Section I, and shall require the inclusion of such provisions of this Section I in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

II. ACCESS RIGHTS RESERVED UNDER CERCLA

In accordance with Federal Facilities Agreement ("FFA"), May 11, 1991 and as amended March 26, 1996, the Grantor, the Environmental Protection Agency ("EPA") and Commonwealth of Massachusetts Department of Environmental Protection ("DEP") and their officers, agents, employees, contractors, and subcontractors have the right, upon reasonable notice to the Grantee, to enter upon the Property in any case in which a response action or corrective action is found to be necessary, after the date of transfer of the Property, such access is necessary to carry out a response action or corrective action on adjoining property, including, without limitation, the following purposes:

1. To conduct investigations and surveys, including, where necessary, drilling, soil and water sampling, testing-pitting, test soil borings and other activities;
2. To inspect field activities of the Grantor and its contractors and subcontractors;
3. To conduct any test or survey related to the environmental conditions at the Property or to verify any data submitted to the EPA or DEP by the Grantor relating to such conditions;
4. To construct, operate, maintain or undertake any other response or remedial actions as required or necessary including, but not limited to monitoring wells, pumping wells and treatment facilities

In exercising the rights hereunder, the Grantor shall give the Grantee or its successors or assigns reasonable notice of actions to be taken on the Property pursuant to this reserved easement and shall, to the extent reasonable, consistent with the FFA defined hereunder and applicable law and regulation, and at no additional cost to the Grantor, and endeavor to minimize the disruption to the Grantee's, its successors', or assigns' use of the Property.

The Grantee shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the provisions of this Section II, and shall require the inclusion of such provisions of this Section II in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

III. FEDERAL FACILITIES AGREEMENT

By accepting this deed, the Grantee acknowledges that the Grantor has provided the Grantee with a copy of the FFA. The Grantor shall provide the Grantee with a copy of any future amendments to the FFA.

A. The Grantor, EPA, The Commonwealth of Massachusetts, and their respective agents, employees, and contractors, shall have such access to, over and through the Property as may be necessary for any investigation, response, or corrective action pursuant to CERCLA or the FFA found to be necessary before or after the date of this Deed on the Property or on other property comprising the Fort Devens National Priorities List (the "NPL") site. This reservation includes the right of access to, and use of, to the extent permitted by law, any available utilities at reasonable cost to the Grantor, EPA and DEP.

B. In exercising the rights hereunder, the Grantor, The Commonwealth of Massachusetts and the EPA shall give the Grantee or its successors or assigns reasonable notice of actions taken on the Property under the FFA and shall, to the extent reasonable, consistent with the FFA, and at no additional cost to the Grantor, The Commonwealth of Massachusetts and the EPA endeavor to minimize the disruption to the Grantee's, its successors' or assigns' use of the Property.

C. The Grantee agrees that notwithstanding any other provision of this Deed, the Grantor assumes no liability to the Grantee, its successors or assigns, or any other person, should implementation of the FFA interfere with the use of the Property. The Grantee and its successors and assigns shall have no claim on account of any such interference against the Grantor or The Commonwealth of Massachusetts, EPA or any officer, agent, employee, or contractor thereof.

D. Prior to the determination by the Grantor, EPA and DEP that all remedial action is complete under CERCLA and the FFA on the Property, the Grantee, its successors and assigns, shall not undertake activities on the Property that would interfere with or impede the completion of the CERCLA clean-up on the Property and shall give prior written notice to the Grantor, the EPA, and The Commonwealth of Massachusetts, acting by and through the DEP, of any construction, alterations, or similar work on the Property that may interfere with or impede said clean-up.

E. The Grantee, its successors and assigns shall comply with any institutional controls established or put in place by the Grantor, EPA or DEP relating to the Property which are required by any FOST or Record of Decision ("ROD") or amendments thereto related to the Property, which ROD shall be approved by the Grantor and EPA and issued by the Grantor pursuant to CERCLA or the FFA before or after the date of this deed. Additionally, the Grantee shall ensure that any leasehold it grants in the Property or any fee interest conveyance of any portion of the Property provides for legally-binding compliance with the institutional controls required by any such FOST or ROD.

F. For any portion of the Property subject to a response action under CERCLA or the FFA, prior to the conveyance of an interest therein, the Grantee shall include in all conveyances provisions for allowing the continued operation of any monitoring wells, treatment facilities, or other response activities undertaken pursuant to CERCLA or the FFA on said portion of the Property and shall notify the Grantor, EPA,

and the DEP by certified mail, at least thirty (30) days prior to any such conveyance of an interest in said Property, which notice shall include a description of said provisions allowing for the continued operation of any monitoring wells, treatment facilities, or other response activities undertaken pursuant to CERCLA or the FFA.

G. The Grantee and all subsequent transferees of an interest in any portion of the Property will provide copies of the instrument evidencing such transaction to the DEP, the EPA, and the Grantor by certified mail, within fourteen (14) days after the effective date of such transaction.

H. The Grantee and all subsequent transferees shall include the provisions of this Section III in all subsequent leases, transfer, or conveyance documents relating to the Property or any portion thereof that are entered into prior to a determination by the Grantor that all remedial action is complete at the Fort Devens NPL site.

IV. FINAL BASE-WIDE ENVIRONMENTAL BASELINE SURVEY AND FOST.

The Grantee has received the technical environmental reports, including the Final Base-Wide Environmental Baseline Survey prepared by Arthur D. Little, Inc. dated March 1996 (the "Base-Wide EBS"); and the individual FOST for the Property is attached hereto as Exhibit B, prepared by, or on behalf of, the Grantor, the Grantee, and others, and Grantor agrees, to the best of the Grantor's knowledge, that said FOST accurately describes the environmental conditions of the Property. The Grantee has inspected the Property and accepts the physical condition and current level of known hazardous substances on the Property as disclosed in the FOST and/or the Base-Wide EBS and deems the Property to be safe for the Grantee's intended use. If, after conveyance of the Property to the Grantee, there is an actual or threatened release of a hazardous substance (as defined under Section 101 of CERCLA) on, under, or from the Property, or in the event that a hazardous substance is discovered on or under the Property after the date of the conveyance hereof, whether or not such hazardous substance was set forth in the technical environmental reports, including the individual FOST's or the Base-Wide EBS, Grantee or its successors or assigns shall be responsible for such release or newly discovered hazardous substance unless the Grantee is able to demonstrate that such release or such newly discovered hazardous substance was due to Grantor's prior activities, ownership, use, or occupation of the Property, or the activities of the Grantor's contractors, employees, and/or agents. The Grantee, its successors and assigns, and as consideration for the conveyance, agree to release the Grantor from any liability or responsibility for any claims arising out of or in any way predicated on the release of any hazardous substance on the Property occurring after the conveyance, where such hazardous substances were placed on the Property by the Grantee, or its agents, employees, invitees, or contractors, after the conveyance.

V. **"AS IS"**

The Property and personal property located thereon is conveyed under this Deed in an "as is, where is" condition, without any representation or warranty whatsoever by the Grantor concerning the state of repair or condition of said Property, unless otherwise noted herein.

VI. **WETLANDS AND FLOODPLAINS**

A. General Provisions

The Property may contain wetlands protected under state, federal and local laws and regulations. Applicable laws and regulations restrict activities that involve draining wetlands or the discharge of fill materials into wetland areas, including, without limitation, the placement of fill materials; the building of any structure; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and dams and dikes. To fulfill the Grantor's commitment in the Fort Devens Disposal and Reuse Environmental Impact Statement Record of Decision, made in accordance with the National Environmental Policy Act of 1969, 42 U.S.C. § 4321 *et seq.*, this deed provides for protection of wetlands beyond what would otherwise specifically be required under federal and state law.

B. Wetlands Protection

To protect water quality, groundwater recharge, and wildlife habitat, the Grantee, its successors, and assigns shall restrict activities within and protect any wetlands on the Property herein conveyed as provided for in Article VII.C. of the Devens By-Laws, dated November 18, 1994, and approved by the towns of Ayer, Harvard, and Shirley on December 7, 1994, Article VII.C. of the Devens By-Laws may be amended from time to time in accordance with applicable law, provided that any such amendment will not affect the obligation of the Grantee and its successors and assigns hereunder to comply with Article VII.C. of the Devens By-Laws, in its form as of the date of this Deed, unless such amendment receives the written consent of the DEP.

B. Enforcement

The Grantee covenants for itself, its successors, and assigns that the Grantee, its successors and assigns shall include, and otherwise make legally binding, the restrictions in this Section VI in all subsequent leases, transfer, or conveyance documents relating to the Property, provided that the Property contains wetlands protected by applicable state or federal law. The restrictions and protections provided for in this Section VI shall run with the land. The restrictions in this Section VI benefit the lands retained by the Grantor that formerly comprised Fort Devens, as well as the public generally. The Grantor and/or The Commonwealth of Massachusetts shall have the right to enforce the wetlands

restrictions provided for in this Section by appropriate legal proceedings and to obtain injunctive and other equitable relief against any violations, including, without limitation, relief requiring restoration of any of the Property to its condition prior to the time of the injury complained of, and shall be in addition to, and not in limitation of, any other rights and remedies available to the Grantor and The Commonwealth of Massachusetts.

VII. NOTICE OF THE PRESENCE OF ASBESTOS

A. The Grantee is hereby informed and does acknowledge that the former buildings located on the Property may have contained friable and non-friable asbestos or asbestos-containing materials ("ACM") as identified in the FOST, the Base-Wide EBS and the Area Requiring Environmental Evaluation 65 ("AREE 65") prepared for the Grantor by Arthur D. Little, Inc., dated May 1995.

B. The Grantee covenants and agrees that its use and occupancy of the Property will be in compliance with all applicable laws relating to asbestos, and that the Grantor assumes no liability for any future remediation of asbestos or damages for personal injury, illness, disability, or death, to the Grantee, its successors or assigns, or to any other person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with asbestos or ACM on the Property, whether the Grantee, its successors or assigns have properly warned or failed to properly warn the individual(s) injured. The Grantee assumes no liability for damages or remediation for personal injury, illness, disability, death or property damage arising from (i) any exposure to asbestos or ACM that resulted prior to the Grantor's conveyance of such portion of the Property to the Grantee pursuant to this Deed or any leases entered into between the Grantor and Grantee, or (ii) any disposal or mishandling of asbestos or ACM by the Grantor prior to the Grantor's lease or deed conveyance of the Property to the Grantee.

C. The Grantee agrees to be responsible for any future remediation of asbestos identified in the Base-Wide EBS, the FOST, or AREE 65 which is determined to be necessary on the Property after the date of the Lease. The Grantor assumes no liability for damages or remediation for personal injury, illness, disability, death or property damage arising from: (i) any exposure to asbestos or ACM that resulted due to the Grantee's failure to comply with any legal requirements applicable to asbestos on any portion of the Property, or (ii) any disposal of asbestos or ACM after the date of lease or deed conveyance of the Property to the Grantee.

D. The Grantee further agrees to bear full responsibility for and discharge the Grantor, its officers, agents and employees, from and against all suits, claims, demands or actions, liabilities, judgments, costs and attorneys' fees to the extent arising out of, or in any manner predicated upon, exposure to asbestos, identified in the Base-Wide EBS, the FOST, or AREE 68 on any portion of the Property, which exposure occurs after the date

of lease or deed conveyance of the Property to the Grantee, or any future remediation or abatement of asbestos on any portion of the Property or the need therefore.

E. The Grantee acknowledges that it has had the opportunity to inspect the Property as to asbestos content and condition and any hazardous or environmental conditions related thereto. The failure of the Grantee to inspect or to be fully informed regarding the content or quantity of ACM as described in the Base-Wide EBS will not constitute grounds for any claim or demand against the Grantor, except as may be otherwise provided in this Deed.

VIII. NOTICE OF THE PRESENCE OF UNDERGROUND STORAGE TANKS

The Grantee is hereby informed and does acknowledge that underground storage tanks (USTs) may have been located on the Property, as described in the Base-Wide EBS and/or the FOST. The Grantee has further been informed by the Grantor that all USTs that have been removed from the Property were tested at the time of removal, and any contamination identified was removed or remediated prior to backfilling.

IX. RADON NOTIFICATION

The Grantee hereby acknowledges receipt of the available radon assessment data pertaining to the former Fort Devens, which are located in the Base-Wide EBS. There are no structures or buildings on the Property, but the radon assessment data indicate that certain buildings at Fort Devens had levels of radon above EPA's radon reduction level of 4 picocuries/liter. A radiation induced increased risk of contracting lung cancer is the primary health concern with elevated levels of indoor radon. The Grantee acknowledges that it has had the opportunity to inspect the Property as to radon levels prior to accepting the Property. Failure of the Grantee to inspect or to be fully informed as to the radon levels of the Property and the former Fort Devens will not constitute grounds for any claim or demand against the United States. The Grantee further agrees to bear full responsibility for and discharge the Army from and against all suits, claims, demands, or actions, liabilities, judgments, costs and attorneys' fees to the extent arising out of, or in any manner predicated upon personal injury, death or property damage resulting from, related to, caused by or arising out of exposure to radon on any portion of the Property after conveyance of the Property or any future redemption or abatement of radon or the need therefore.

The Grantee shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the provisions of this Section IX and shall require the inclusion of such provisions of this Section IX in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

X. NOTICE OF THE PROGRAMMATIC AGREEMENT

The Grantee agrees to comply with applicable provisions of the Programmatic Agreement among the Grantee, the Advisory Council on Historic Preservation, and the Massachusetts Historic Commission dated March 20, 1996, (the "Programmatic Agreement") which pertain or otherwise apply to the Property. The Programmatic Agreement regulates those activities that may affect structures, facilities, or cultural or archeological sites eligible for, or listed on, the National Register of Historic Places.

XI. MEC NOTIFICATION

The Grantor completed a comprehensive records search, and based on that search, has undertaken and completed statistical and physical testing of areas on the Property, if any, where the existence of munitions and explosives of concern ("MEC") was considered to be present. The term "MEC" means military munitions that may pose unique explosives safety risks, including: (A) unexploded ordnance (UXO), as defined in 10 U.S.C. 2710 (e) (9); (B) discarded military munitions (DMM), as defined in 10 U.S.C. 2710 (e) (2); or (C) explosive munitions constituents (e.g. TNT, RDX) present in high enough concentrations to pose an explosive hazard. Based upon said survey, the Grantor represents that, to the best of its knowledge, no MEC is currently present on the Property. Notwithstanding the survey conducted by the Grantor, the parties acknowledge that given the finding of potential MEC contamination on other parcels at Fort Devens, and due to the former use of the Property as part of an active military installation and training grounds, there is a possibility that MEC may exist on the Property. In the event that the Grantee, its successors and assigns, or any other person should discover any MEC on the Property, it shall not attempt to remove or destroy it, but shall immediately notify the local Police Department and the Grantor, or the Grantor's designated explosive ordnance representative. Personnel will be dispatched promptly to dispose of such ordnance at no expense to the Grantee.

The Grantee shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the provisions of this Section XI, and shall require the inclusion of such provisions of this Section XI in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

XII. NPL PROPERTY

The Grantor acknowledges that Fort Devens has been identified as a NPL site under CERCLA. The Grantee acknowledges that the Grantor has provided it with a copy of the FFA entered into by the EPA, Region I and the Grantor, effective May 13, 1991, and that the Grantor will provide the Grantee with a copy of any amendments thereto. The person or entity to whom the Property is transferred agrees that should any conflict arise between the terms of the FFA as they presently exist or may be amended, and the provision of this Property transfer, the terms of the FFA will take precedence. The person

or entity to whom the Property is transferred further agrees that notwithstanding any other provisions of the Property transfer, the Grantor assumes no liability to the persons or entity to which the Property is transferred should implementation of the FFA interfere with their use of the Property. The person or entity to whom the Property is transferred or any subsequent transferee, shall have no claim on account of any such interference against the Grantor or any officer, agent, employee, or contractor thereof.

The Grantee shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the provisions of this Section XII, and shall require the inclusion of such provisions of this Section XII in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

XIII. USE RESTRICTIONS

The Grantor has undertaken careful environmental study of the Property and concluded, with the Grantee's concurrence, that the highest and best use of the Property is limited, as result of its environmental condition, to commercial and industrial uses (Lease Parcels A2A (AOC9) and A8 (SA13)) or open space and recreation uses (Lease Parcel A4 (AOC40)). In order to protect human health and the environment and further the common environmental objectives and land use plans of the Grantor and Grantee, the covenants and restrictions shall be included to assure the use of the Property is consistent with environmental condition of the Property. These following restrictions and covenants benefit the lands retained by the Grantor and the public welfare generally and are consistent with state and federal environmental statutes.

The Grantee covenants for itself, its successors, and assigns not to use the Property for residential purposes unless evaluated by a Massachusetts Licensed Environmental Professional who shall render an opinion acceptable to the EPA and DEP as to whether the proposed residential use is protective of human health, the environment, safety and public welfare and is consistent with the conclusion that no substantial hazards remain. Any and all requirements set forth by the EPA and DEP to meet the objective of this FOST shall be satisfied before any such activity or use is commenced. The Property has been remediated in accordance with the ROD. The Grantee, for itself, its successors or assigns covenants that it will not undertake nor allow any activity on or use of the Property that would violate the restrictions contained herein. These restrictions and covenants are binding on the Grantee, its successors and assigns; shall run with the land; and are forever enforceable. Nothing contained herein shall preclude the Grantee from undertaking, in accordance with applicable laws and regulations and without any cost to the Grantor, such additional remediation necessary to allow for residential use of the Property. Upon completion of such remediation required to allow residential use of the Property and upon the Grantee's obtaining the approval of the EPA and DEP and, if required, any other regulatory agency, the Grantor agrees, without cost to the Grantor, to release or, if appropriate, modify this restriction by recordation of an amendment hereto.

The Grantee shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the provisions of this Section XIII, and shall require the inclusion of such provisions of this Section XIII in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

XIV. NON-WAIVER OF CERCLA CLAIMS

Nothing contained in this Deed shall affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by the FFA, CERCLA or other applicable law, rules and regulations, or the Grantor's indemnification obligations under Section 330 of the National Defense Base Authorization Act of 1993, as amended.

XV. NOTICE OF NON-DISCRIMINATION

With respect to activities related to the Property, the Grantee shall not discriminate against any person or persons or exclude them from participation in the Grantee's operations, programs or activities conducted on the Property because of race, color, religion, sex, age, handicap, or national origin.

XVI. INDEMNIFICATION

A. The Grantor recognizes its obligation to hold harmless, defend, and indemnify the Grantee and any successor, assignee, transferee, lender, or lessee of the Grantee or its successors and assigns, as provided in Section 330 of the Department of Defense Authorization Act of 1993, as amended, and to otherwise meet its obligations under law, subject to the availability of appropriated funds.

B. The Grantee shall indemnify and hold the Grantor harmless from all claims, liability, loss, cost, environmental contamination, or damage arising out of or resulting from the activities of the Grantee, its agents, employees, or contractors on the Property prior to the date of this Deed, except where such claims, liability, loss, cost, environmental contamination, or damage is the result of the gross negligence or willful misconduct of the Grantor or its employees, agents, or contractors.

XVII. ANTI-DEFICIENCY ACT

The Grantor's obligation to pay or reimburse any money under this Deed is subject to the availability of appropriated funds to the Department of the Army, and nothing in this Deed shall be interpreted to require obligations or payments by the United States in violation of the Anti-Deficiency Act, 31 U.S.C. Section 1341.

IN WITNESS WHEREOF, the Grantor has caused this Deed to be executed in its name by the Deputy Assistant Secretary of the Army (Installations and Housing this 9th day of January, 2008.)

UNITED STATES OF AMERICA



JOSEPH W. WHITAKER
Deputy Assistant Secretary of the Army
(Installations and Housing)
OASA(I&E)

ACKNOWLEDGEMENT

COMMONWEALTH OF VIRGINIA)
) SS:
COUNTY OF ARLINGTON)

I, the undersigned, a Notary Public in and for the Commonwealth of Virginia, County of Arlington, do hereby certify that this day personally appeared before me in the Commonwealth of Virginia, County of Arlington, Joseph W. Whitaker, Deputy Assistant Secretary of the Army (Installations and Housing), whose name is signed to the foregoing instrument and who acknowledges the foregoing instrument to be his free act and deed on the date shown, and acknowledged the same for and on behalf of the United States of America.



Notary Public

My commission expires: 30 September 2008

ACCEPTANCE: The Massachusetts Development Finance Agency, a Massachusetts body politic and corporate created by Chapter 23G of the Massachusetts General Laws, successor in interest to the Government Land Bank under Chapter 289 of the Acts of 1998, as amended, by its duly qualified and authorized President and CEO, Robert L. Culver, does hereby accept and approve this Quitclaim Deed and agrees to all of the terms and conditions thereof as of the 23rd day of February, 2006.

MASSACHUSETTS DEVELOPMENT
FINANCE AGENCY

By: Robert L. Culver
Name: Robert L. Culver
Title: President and CEO

THE COMMONWEALTH OF MASSACHUSETTS

Suffolk County, ss.

On this 23rd day of February 2006, before me, the undersigned notary public, personally appeared Robert L. Culver, and proved to me through satisfactory evidence of identification, which was ☐ photographic identification with signature issued by a federal or state governmental agency, ☐ oath or affirmation of a credible witness, ☒ personal knowledge of the undersigned, to be the person whose name is signed on the preceding or attached document(s), and acknowledged to me that he signed it voluntarily for its stated purpose, as President and CEO of Massachusetts Development Finance Agency.

(official seal)

Richard W. Holtz Notary Public
My commission
expires:

RICHARD W. HOLTZ
NOTARY PUBLIC

My Commission Expires on Sept. 7, 2012

This deed was prepared/reviewed by
Julie D'Esposito, Attorney
U.S. Army Corps of Engineers, New England District

EXHIBIT A
LEGAL DESCRIPTION OF A2A, A4 AND A8

PARCEL A2A

A certain Parcel of Land located in the town of Shirley, Middlesex County, MA, known as Parcel A2A. Beginning at a point with the NAD coordinates ($\pm 50'$) N3030060, E624820.

- Thence N11°-00'W, one hundred forty eight feet \pm (148 \pm) to a point;
- Thence N07°-30'E, six hundred twenty feet \pm (620 \pm) to a point;
- Thence N00°-20'E, six hundred eighty feet \pm (680 \pm) to a point;
- Thence N41°-00'E, three hundred forty feet \pm (340 \pm) to a point;
- Thence S26°-00'E, five hundred seventy three feet \pm (573 \pm) to a point;
- Thence S56°-00'E, two hundred eighty three feet \pm (283 \pm) to a point;
- Thence S21°-00'E, five hundred forty four feet \pm (544 \pm) to a point;
- Thence N84°-05'-04"W, three hundred nine and forty two one hundredths feet (309.42') to a point;
- Thence S52°-10'-12"W, two hundred fifty and five one hundredths feet (250.05') to a point;
- Thence S51°-55'-00"W, four hundred fourteen and ninety one hundredths feet (414.9') to a point;
- Thence S43°-20'-55"W, one hundred ninety three and thirty four one hundredths feet (193.34') to the point of beginning.

Said Parcel Contains 18.5 \pm acres.

PARCEL A4

A certain parcel of land located in the Town of Harvard, Worcester County, MA, known as lease parcel A4, bordering Patton Road on two sides, beginning at a point with the NAD coordinates ($\pm 50'$) N3018460, E629390.

- Thence along the north side of Patton Road, west eleven hundred and ninety one feet \pm , (1191' \pm) to a point;
- Thence N37° 39'W, two hundred and fifty six feet \pm , (256' \pm) to a point;
- Thence N16° 30'E, one hundred and sixty three feet \pm , (163' \pm) to a point;
- Thence N60° 25'E, two hundred and forty six feet \pm , (246' \pm) to a point;
- Thence N69° 30'E, eight hundred and ninety five feet \pm , (895' \pm) to a point;
- Thence S70° 10'E, two hundred and forty one feet \pm , (241' \pm) to a point on the west sideline of Patton Road;
- Thence along Patton Road southerly five hundred and fourteen feet \pm , (514' \pm) to the point of beginning;

Said parcel contains 16 \pm acres.

PARCEL A8

A certain parcel of land located in the Town of Harvard, Worcester County, MA, known as lease parcel A8, beginning on the westerly sideline of Lake George Street, at a point with NAD coordinates ($\pm 50'$) N3019300, E620800.

- Thence south along the west side of Lake George Street one thousand one hundred and fifty three feet \pm , (1153' \pm) to a point;
- Thence S25° 30'E, one hundred and eighty six feet \pm , (186' \pm) to a point;
- Thence N46° 35'W, eight hundred and forty two feet \pm , (842' \pm) to a point;
- Thence N23° 30'W, one hundred and sixty nine feet \pm , (169' \pm) to a point;
- Thence N07° 55'W, four hundred and ninety feet \pm , (490' \pm) to a point;
- Thence N87° 15'E, one hundred and thirty five feet \pm , (135' \pm) to a point;
- Thence N33° 45'E, seventy three feet \pm , (73' \pm) to a point;
- Thence N88° 45'E, three hundred and twenty three feet \pm , (323' \pm) to the point of beginning;

Said parcel contains 9.7 acre \pm .

Exhibit B
Quitclaim Deed
Parcels A2A, A4 & A8

FINAL

FINDING OF SUITABILITY TO TRANSFER

**LEASE PARCELS
A2A (AOC 9), A4 (AOC 40) AND A8 (SA 13)
FORT DEVENS, MASSACHUSETTS**

FEBRUARY 2005

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FINDING OF SUITABILITY TO TRANSFER FORT DEVENS, MASSACHUSETTS

Lease Parcels A2A, A4, and A8

1.0 PURPOSE

The purpose of this Finding of Suitability to Transfer ("FOST") is to document the environmental suitability of certain parcels of property at the former Fort Devens, Devens, Massachusetts ("Devens") for transfer to the Massachusetts Development Finance Agency for development as commercial/industrial property (Lease Parcels A2a (AOC9) and A8 (SA13)) or open space/recreation property (Lease Parcel A4 (AOC40)) consistent with Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") Section 120(h) and Department of Defense Policy. In addition, the FOST identifies use restrictions as specified in the attached Environmental Protection Provisions necessary to protect human health or the environment after such transfer.

2.0 PROPERTY DESCRIPTION AND HISTORY

Property Description. The proposed property to be transferred, Lease Parcels A2A, A4, and A8 (the "Property"), consists of a total of 44.2 (±) acres of the former Devens Main and North Posts: A2A is 18.5 acres; A4 is 16.0 acres; and, A8 is 9.7 acres respectively. Site Location Maps and survey boundary descriptions are provided as Enclosure 1. Lease Parcel A2A, referred to as the North Post Landfill, is located south and west of the Devens Wastewater Treatment Plant Filter Beds and was designated Area of Contamination (AOC) 9 in the 1996 Environmental Baseline Survey (EBS) for Fort Devens. Lease Parcel A4 is located along the edge of Patton Road in the southeastern section of the Main Post. A section of Lease Parcel A4 has been named the Cold Spring Brook Landfill after approximately four (4) acres was used as a debris fill area and designated AOC 40 within the Devens EBS. Lease Parcel A8 is referred to as the Lake George Street Landfill and is located west of Lake George Street near the Nashua River. The fill area was designated Study Area (SA) 13.

History. Lease Parcel A2A (North Post Landfill) was formerly operated as a demolition debris and solid waste fill area that operated from the late 1950's until 1978. Operations at the North Post Landfill are reported to have included the disposal of construction demolition debris, tires, concrete, asphalt, scrap metal, bricks, wood, automobiles and auto parts, tree stumps, and other debris. The North Post Landfill was designated AOC 9 due to the potential for contamination on the site as a result of past operations as a landfill. Lease Parcel A4 was formerly operated as demolition debris and solid waste fill area beginning in the mid to late 1960's and extended approximately 800-feet along Patton Road adjacent to Cold Spring Brook Pond. The site was designated AOC 40 following the discovery of fourteen empty 55-gallon drums, potentially containing chlorinated solvents and metal contaminants, along the edge of Cold Spring Brook Pond in November 1987. Other wastes located at AOC 40 included concrete slabs, wire, storage tanks, rebar, timber, and miscellaneous debris. Lease Parcel A8 (SA 13) was formerly operated as a solid waste landfill area and was known as the Lake George Street Landfill.

According to historical records, no buildings or other structures existed on A2A and A4, but a building did exist in the area of Lease Parcel A8 circa 1965 to 1972. The building was demolished, and the Lake George Street Landfill Lease Parcel A8 was used as construction debris and stump landfill operating between late 1965 and 1990. (See Sites Close out Report). The remedial alternative specified in the Record of Decision (ROD) called for full excavation of A2a (AOC 9), A4 (AOC 40), and A8 (SA 13). The excavated areas were then backfilled to restore the site to a natural or desired condition.

All of the waste debris described above was removed and properly disposed of off-site or in the consolidated landfill under the ROD.

3.0 ENVIRONMENTAL CONDITION OF PROPERTY

A determination of the environmental condition of the facilities has been made based on environmental assessment, investigative reports, and remedial actions including but not limited to:

- Final Environmental Baseline Survey for Fort Devens, 1996 ("EBS");
- Final Site Investigation Report, Main Post Site Investigation, December, 1994;
- Final Remediation Investigation Report for Areas of Contamination ("AOCs") 4, 5, 18, 40; Fort Devens, Massachusetts, April 1993;
- Final Record of Decision, for Landfill Remediation Areas of Contamination 9, 11, 40 & 41 and Study Areas 6, 12, and 13, Devens Reserve Forces Training Area, Devens Massachusetts, July 6, 1999;
- Consolidated Landfill Closure Certification Reports, September 30, 2003;
- and
- Removal Action Report, Ordnance, Ammunition & Explosive Removal Action, Devens RFTA, 10 Oct 1996 ("MEC Report")

The Property information provided for the three lease parcels is a result of a complete search of Department of Defense ("DOD") files by the Army during the development of this FOST. A complete list of documents that provide information on environmental conditions of the Property is attached (Enclosure 2).

3.1 ENVIRONMENTAL CONDITION OF PROPERTY CATEGORIES

The complete list of the DOD Environmental Condition of Property ("ECP") Categories for the property proposed for transfer is located in Table 1 - Description of Property (Enclosure 3). The EPC Category for the Properties have been changed from "Leasable" to ECP Category -4, since all remedial actions necessary to protect human health and the environment have been completed and a Closure Certification issued by EPA on September 30, 2003. See Table 1 at Enclosure 3.

3.2 STORAGE, RELEASE, OR DISPOSAL OF HAZARDOUS SUBSTANCES

The potential for a release or the disposal of hazardous substances in excess of the reportable quantities listed in 40 CFR 373 has been investigated by DOD at the Property. Parcel A2A (AOC 9) was characterized during a Site Investigation (SI) in 1996; Parcel

A4 (AOC 40) was characterized during a Remedial Investigation (RI) in 1993; and Parcel A8 (SA 13) was characterized during a separate SI in 1995. The results of these investigations and corresponding Preliminary Risk Evaluations (PREs) prepared by DOD are summarized within the July 1999, ROD for Landfill Remediation, AOC 9, 11, 40 & 41 and Study Areas 6, 12, and 13, Devens Reserve Training Area. This investigation included evaluation of the fourteen empty 55-gallon drums, likely containing chlorinated solvents and metal contaminants. These drums were discovered along the edge of Cold Spring Brook Pond in November 1987 and were removed from the site. Each lease parcel fill area was recommended for removal under the terms of the ROD with no further remedial action required following the removal and consolidation of the excavated fill materials (Parcels A2A, A4, and A8), impacted soils (Parcels A2A, A4, and A8), and sediments (Parcel A4) within the Fort Devens Consolidated Landfill. Based on the results of these investigations, a notification of hazardous substance storage, release, or disposal is provided in Tables 2d (Parcel A2A), 2e (Parcel A4), and 2f (Parcel A8) at Enclosure 4.

3.2.1 Solid Waste Management Units (SWMUs)

There are no Solid Waste Management Units (SWMUs) as defined under Massachusetts Solid Waste Regulations located within the boundaries of the Property. Therefore, a notification of SWMUs is not required.

3.2.2 Soil, Groundwater and Surface Water Contamination

Soil. All soil contamination was remediated to an acceptable level based on the comparison of confirmatory sample results to the USEPA Region 9 Preliminary Remediation Goals (PRGs) for residential soils and the Massachusetts Contingency Plan (MCP) Method 1: Soil Category S-2 Standards applicable to the planned land uses and disposed of in accordance with the ROD.

Lease Parcel A2A was determined to have limited amounts of organic polynuclear aromatic hydrocarbons and beryllium metal present in subsurface soils at concentrations exceeding USEPA Region III human health guidelines for commercial industrial land use. The landfill contents and affected soils were excavated and consolidated with landfill materials from Lease Parcels A4 and A8 into the Devens Consolidated Landfill or disposed of off site (ROD 1999).

Lease Parcel A4 investigations concluded that soil and sediment contamination included SVOCs, pesticides, and inorganic compounds at the Cold Spring Brook Landfill. Following the ROD and Preliminary Risk Evaluations (PRE), soils and sediments from Parcel A4 were approved for consolidation with excavated materials from Lease Parcels A2A and A8 and disposed of in the Consolidated Landfill or off site in accordance with the ROD.

Lease Parcel A8 investigations concluded that landfill activities did not contribute to soil or groundwater contamination at the Lake George Street Landfill. The landfill contents from Lease Parcel A8 were later consolidated with fill materials from Lease Parcels A2A and A4 into the Consolidated Landfill. Based on the pre-assessment during development of the ROD, the fill and limited sediment areas were approved for removal and consolidation into the Consolidated Landfill.

The contents of each of three former landfills are now secured within the Consolidated Landfill, recycled or disposed of off site. The closure certification for the Consolidated Landfill was issued on September 30, 2003.

Ground Water and Surface Water. Groundwater contamination was detected at various locations at Fort Devens as indicated by the SI and RI. Groundwater and surface water were investigated at the Property during the series of investigations.

Groundwater and surface water were characterized at Parcel A2A and surrounding area during two rounds of testing during the SI. Surface water samples contained inorganic constituents similar to water quality characteristics in the area of the Nashua River located adjacent to Parcel A2A. Groundwater analysis detected two types of organic compounds, volatile organic compounds and semi-volatile organic compounds, and inorganic contaminants in unfiltered samples during the first round of sampling. Total Petroleum Hydrocarbon Compounds analysis constituents were also detected during both round 1 and 2 sampling events. Inorganics were not detected above their respective US EPA drinking water standard or guideline after the groundwater samples were filtered during the second round of testing. However, even with the presence of these constituents, groundwater was determined not to be impacted.

The groundwater and surface water were determined not to be impacted such that no additional remediation was required at Lease Parcel A4.

Groundwater and surface water were characterized at Lease Parcel A8 during the implementation of a SI. Surface water was not found to directly discharge to the Nashua River and groundwater was not impacted from former filling operations.

3.3 PETROLEUM AND PETROLEUM PRODUCTS

Petroleum and petroleum products have been assessed at the Property in two categories: not in underground or above-ground storage tanks (Section 3.3.1, Storage, Release, or Disposal of Petroleum Products) and, within underground and above ground storage tanks (Section 3.3.2, Underground and Above Ground Storage Tanks). The results of the petroleum and petroleum product assessment are as follows:

3.3.1 Storage, Release, or Disposal of Petroleum Products

Residual quantities of petroleum or petroleum products were disposed at the sites during historical operations as indicated by the EBS and SI/RI. Each of the sites was used for filling operations of debris materials. Significant environmental media investigations have been conducted at each site in order to establish if any such release or disposal conditions exist. Based on the results of these investigations, a notification of petroleum product storage, release, or disposal is provided in Tables 2a (Parcel A2A), 2b (Parcel A4), and 2c (Parcel A8) at Enclosure 4. As discussed in 3.2.2 above, contaminated soil was excavated and consolidated into the Devens Consolidated Landfill or disposed of off site in accordance with the ROD.

3.3.2 Underground and Above Ground Storage Tanks (UST/AST)

There is no evidence that petroleum or petroleum products were stored in underground or above ground storage tanks on or at the Property. Accordingly, a notification of petroleum or petroleum product storage, release or disposal in underground or above ground storage tanks is not required for the Property.

3.4 POLYCHLORINATED BIPHENYLS (PCBs)

There were no known PCB-containing transformers, equipment, or devices on Lease Parcels the Property. In addition, no PCB containing equipment or associated debris was reported identified during consolidation activities that were performed under regulatory oversight. Accordingly, a notification for PCBs for the Property is not required.

3.5 ASBESTOS

A former Fort Devens Aerial photograph taken in April 1965 shows a building on Lease Parcel A8 however another similar aerial photograph taken in 1972 does not show the building or any other building on any of these parcels. Therefore, it is presumed by DOD that the building must have been demolished. Since there are no buildings or structures with asbestos containing material (ACM) currently located on the Property, and all the contaminated soil from these parcels were excavated and taken to the Consolidated landfill and backfilled with clean soil hence leaving no ACM on these parcels, the deed will not include an asbestos warning or covenant in the Environmental Protection Provisions.

3.6 LEAD BASED PAINT ("LBP")

As described in paragraph 3.5, there was a building on Lease Parcel A8 that was demolished. Based on the age of the building (constructed prior to 1978), the building is presumed to have contained lead-based paint, but the soil was excavated after the area was used as a construction debris landfill. Since there are no buildings or structures with LBP currently located on the Property, the deed will not include a LBP warning or covenant in the Environmental Protection Provisions.

3.7 RADIOLOGICAL MATERIALS

Based on the EBS dated April 1996, there is no evidence that radioactive material or sources were used or stored on the property.

3.8 RADON

A radon survey was conducted at former Fort Devens during a North Post residential housing survey in 1995. A radon survey is not known to have been conducted at the Property. Radon was detected at or above the EPA residual action level of 4 picocuries per liter (pCi/L) in some buildings that were sampled during the North Post survey. Therefore, the deed will include the radon notification provisions provided in the Environmental Protection Provisions (Enclosure 5).

3.9 MUNITIONS AND EXPLOSIVES OF CONCERN ("MEC")

Based on a review of the MEC Reports by the Army, the Property is not known to contain MEC. However, some MEC was found on parcel A2A and properly disposed as indicated by Removal Action Report, 1996. Therefore, an MEC notification is included in the Environmental Protection Provisions (Enclosure 5).

4.0 REMEDIATION

A Federal Facility Agreement dated May 13, 1991 and amended March 4, 1996, applies to the Property. All remediation activities on the Property required by such agreement are completed or in place and operating properly and successfully. The deed will include a provision reserving the Army's right to conduct remediation activities in the Environmental Protection Provisions, (Enclosure 5), as necessary.

5.0 REGULATORY/PUBLIC COORDINATION

US Environmental Protection Agency (EPA) and Massachusetts Department of Environment Protection (MDEP) acted as Regulatory agencies (Regulators) for this FOST review. This FOST was coordinated with Public and the Regulators for their comments. Public Notification and Regulatory comments and applicable response to these comments are presented at Enclosure 6. No Public comments were received during the Public coordination period.

6.0 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE AND CONSISTENCY WITH LOCAL REUSE PLAN

The environmental impacts associated with the proposed transfer of the Property have been analyzed in accordance with the National Environmental Policy Act (NEPA) and Devens Reuse Plan. The result of this analysis has been documented in the 1995 Final Environmental Impact Statement, Fort Devens, Massachusetts, Disposal and Reuse. Any encumbrances or conditions identified in such analysis as necessary to protect human health or the environment have been incorporated into the FOST. In addition, the proposed transfer is consistent with the intended reuse of the Property as set forth in the Devens Reuse Plan.

7.0 ENVIRONMENTAL PROTECTION PROVISIONS

On the basis of the above results from the EBS and other environmental studies (SI/RI) and in consideration of the intended use of the property, certain terms and conditions are required for the proposed transfer. These terms and conditions are set forth in the attached Environmental Protection Provisions and will be included in the deed (Enclosure 5).

8.0 FINDING OF SUITABILITY TO TRANSFER

Based on the above information, I conclude that Department of Defense requirement to reach a finding of suitability to transfer the Property have been met, subject to the terms and conditions set forth in the attached Environmental Protection Provisions (Enclosure 5). All removal or remedial actions necessary to protect human health and the environment have been taken and the property is transferable under CERCLA section 120(h) (3). In addition to the Environmental Protection Provisions, the deed for this transaction will also contain:

- The covenant under CERCLA §120 (h)(3)(A)(ii)(I) warranting that all remedial action under CERCLA necessary to protect human health and the environment with respect to hazardous substances remaining on the Property has been taken before the date of transfer.
- The covenant under CERCLA §120 (h)(3)(A)(ii)(II) warranting that any remedial action under CERCLA found to be necessary after the date of transfer with respect to such hazardous substances remaining on the Property shall be conducted by the United States.
- The clause as required by CERCLA §120 (h)(3)(A)(iii) granting the United States access to the Property in any case in which remedial action or corrective action is found to be necessary after the date of transfer.

As required under CERCLA Section 120(h) and DOD FOST Guidance, notification of petroleum product activities shall be provided in the deed. See Tables 2a, 2b, and 2c. Notification of Petroleum Product Storage, Release, or Disposal, Lease Parcels A2A (AOC9), A4 (AOC40), and A8 (SA13) (Enclosure 4, Tables 2a, 2b and 2c). Notification of Hazardous Substance Storage, Release, or Disposal (Enclosure 4 Tables 2d, 2e and 2f).

 15 Feb 05

Glynn D. Ryan
Chief, Atlanta Field Office
Department of the Army
Base Realignment and Closure

Enclosures:

1. Site Location Maps, Site Plans & Survey Boundary Descriptions
2. References
3. Table 1, Environmental Condition of Property (ECP) Categories
4. Table 2a, 2b, 2c Notification of Petroleum Products Storage, Release, or Disposal and Table 2d, 2e, 2f Notification of Hazardous Substance Storage, Release, or Disposal
5. Environmental Protection Provisions
6. Regulatory/Public Comments

ENCLOSURE 1

**FINDING OF SUITABILITY TO TRANSFER
LEASE PARCELS A2A, A8, AND A4
FORT DEVENS, MASSACHUSETTS**

SITE LOCATION MAPS AND SURVEY BOUNDARY DESCRIPTIONS



FOST_map_9_13_40

.pdf








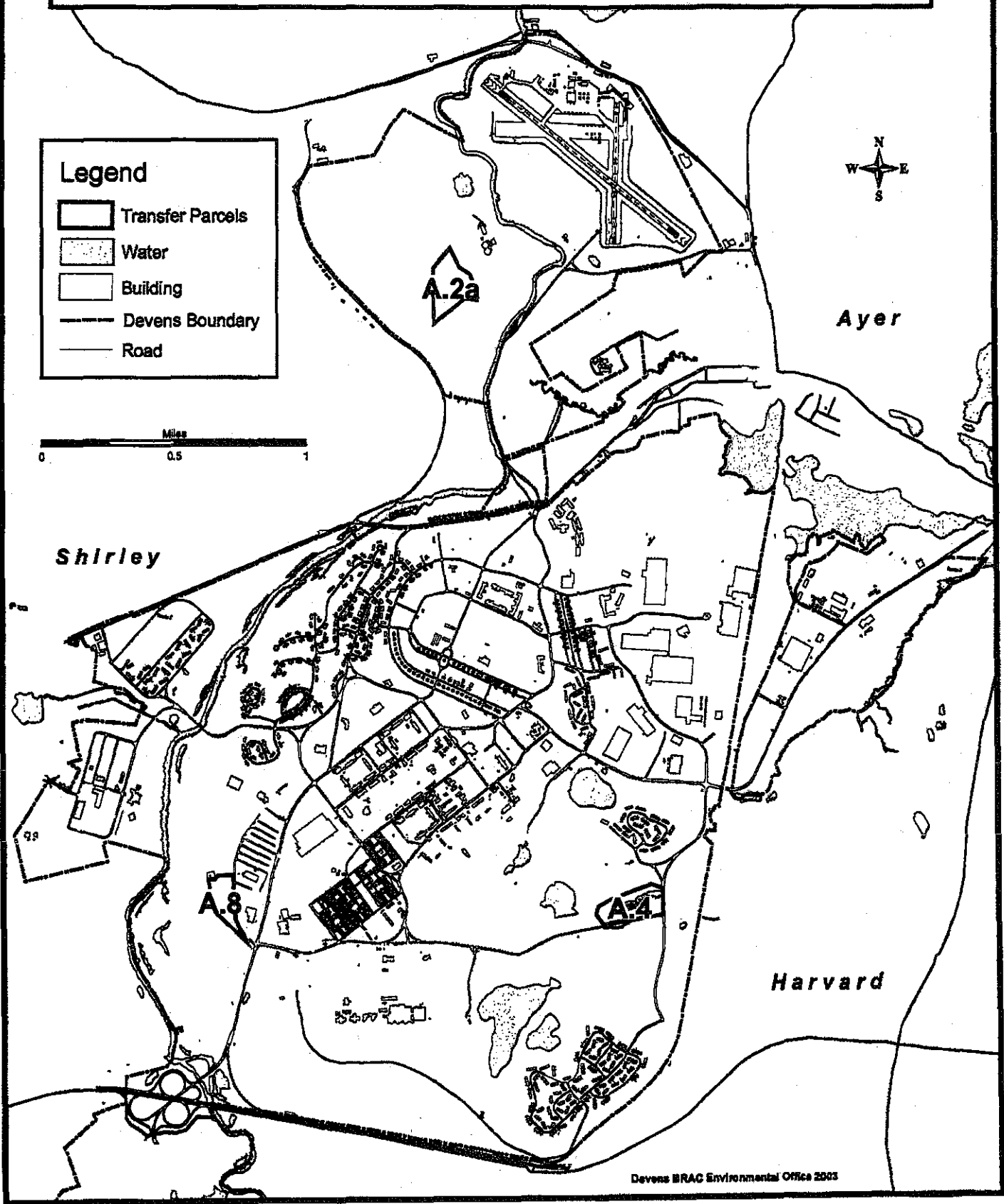
SurveyBoundaryDes

criptions.pdf

Location of Transfer Parcels A.2a, A.4 & A.8

Legend

-  Transfer Parcels
-  Water
-  Building
-  Devens Boundary
-  Road



Survey Boundary Descriptions

PARCEL #A8

A certain parcel of land located in the Town of Harvard, Worcester County, MA, known as lease parcel A8, beginning on the westerly sideline of Lake George Street, at a point with NAD coordinates ($\approx 50'$) N3019300, E620800.

- Thence south along the west side of Lake George Street one thousand one hundred and fifty three feet \approx , (1153' \approx) to a point;
- Thence S25° 30'E, one hundred and eighty six feet \approx , (186' \approx) to a point;
- Thence N46° 35'W, eight hundred and forty two feet \approx , (842' \approx) to a point;
- Thence N23° 30'W, one hundred and sixty nine feet \approx , (169' \approx) to a point;
- Thence N07° 55'W, four hundred and ninety feet \approx , (490' \approx) to a point;
- Thence N87° 15'E, one hundred and thirty five feet \approx , (135' \approx) to a point;
- Thence N33° 45'E, seventy three feet \approx , (73' \approx) to a point;
- Thence N88° 45'E, three hundred and twenty three feet \approx , (323' \approx) to the point of beginning;

Said parcel contains 9.7 acres \approx .

PARCEL # A4

A certain parcel of land located in the Town of Harvard, Worcester County, MA, known as lease parcel A4, bordering Patton Road on two sides, beginning at a point with the NAD coordinates ($\approx 50'$) N3018460, E629390.

- Thence along the north side of Patton Road, west eleven hundred and ninety one feet \approx , (1191' \approx) to a point;
Thence N37° 39'W, two hundred and fifty six feet \approx , (256' \approx) to a point;
- Thence N16° 30'E, one hundred and sixty three feet \approx , (163' \approx) to a point;
- Thence N60° 25'E, two hundred and forty six feet \approx , (246' \approx) to a point;
- Thence N69° 30'E, eight hundred and ninety five feet \approx , (895' \approx) to a point;
- Thence S70° 10'E, two hundred and forty one feet \approx , (241' \approx) to a point on the west sideline of Patton Road;
- Thence along Patton Road southerly five hundred and fourteen feet \approx , (514' \approx) to the point of beginning;

Said parcel contains 16 acres \approx .

PARCEL A2A

A certain Parcel of Land located in the town of Sbirley, Middlesex County, MA, known as Parcel A2A. Beginning at a point with the NAD coordinates ($50'$) N3030060, E624820.

Thence N11°-00'W, one hundred forty eight feet \approx (148' \approx) to a point;

- Thence N07°-30'E, six hundred twenty feet = (620=) to a point;
- Thence N00°-20'E, six hundred eighty feet = (680=) to a point;
- Thence N41°-00'E, three hundred forty feet = (340=) to a point;
- Thence S26°-00'E, five hundred seventy three feet = (573=) to a point;
- Thence S56°-00'E, two hundred eighty three feet = (283=) to a point;
- Thence S21°-00'E, five hundred forty four feet = (544') to a point;
- Thence N84°-05'-04"W, three hundred nine and forty two one hundredths feet (309.42') to a point;
- Thence S52°-10'-12"W, two hundred fifty and five one hundredths feet (250.05') to a point;
- Thence S51°-55'-00"W, four hundred fourteen and ninety one hundredths feet (414.9') to a point;
- Thence S43° 20'-55"W, one hundred ninety three and thirty four one hundredths feet (193.34') to the point of beginning.

Said Parcel Contains 18.5= acres.

ENCLOSURE 2

FINDING OF SUITABILITY TO TRANSFER LEASE PARCEL A2A, A8, AND A4 FORT DEVENS, MASSACHUSETTS

REFERENCES

1. Arthur D. Little, Inc. (ADL), 1996, "Environmental Baseline Survey, for Proposed Lease and/or Transfer, Fort, Devens-Base wide, April.
2. Ecology and Environmental, Inc., 1993. "Final Remedial Investigation Report for Areas of Contamination (AOC) 4, 5, 18, 40, Fort Devens, Massachusetts"; Prepared for the US Army Toxic and Hazardous Material Agency, Aberdeen Proving Ground, Maryland.
3. Harding Lawson Associates, 1999. "Final Record of Decision (ROD), Landfill Remediation Study Areas 6, 12, and 13 and Areas of Contamination (AOC) 9, 11, 40, and 41"; Prepared for US Corps of Engineers, New England District, July.
4. Harding Lawson Associates, 1998. "Landfill Remediation Feasibility Study Addendum Report", November.
5. Vanasse Hanger Brustlin, Inc (VHB) 1994. "Fort Devens Reuse Plan." Prepared for the Joint Boards of Selectmen (Town of Ayer, Harvard, Lancaster, and Shirley) and the Massachusetts Government Land Bank; July.
6. ABB Environmental Services, Inc., 1994. "Supplemental Site Investigations Data Packages - Groups 2 & 7, Fort Devens, Massachusetts"; Data Item 9; Prepared for the US Army Environmental Center; January.
7. Arthur D. Little, Inc. (ADL), 1995. "Final Maintenance and Waste Accumulation Area (AREE 61) Report"; prepared for U.S. Army Environmental Center; October.
8. Arthur D. Little, Inc. (ADL), 1995. "Final Transformer Study (AREE 66) Report"; prepared for U.S. Army Environmental Center; September.
9. Arthur D. Little, Inc. (ADL), 1995. "Asbestos Survey (AREE 65) Report"; prepared for U.S. Army Environmental Center; October.
10. Arthur D. Little, Inc. (ADL), 1995. "Lead-Based Paint Survey (AREE 68) Report"; prepared for U.S. Army Environmental Center; October.
11. Arthur D. Little, Inc. (ADL), 1995. "Radon Survey (AREE 67) Report"; prepared for U.S. Army Environmental Center; October.
12. U.S. Department of the Army, Corps of Engineers, New England Division, 1995. "Final Environmental Impact Statement, Fort Devens, Massachusetts, Disposal

and Reuse." Prepared for U.S. Department of Army, Headquarters, Forces Command, Fort McPherson, Ga.; May.

13. U.S. Environmental Protection Agency (USEPA), 1991. "In the Matter of: The U.S. Department of the Army, Fort Devens Army Installation, Fort Devens, MA; Federal Facility Agreement Under CERCLA Section 120"; May. ; amended March 4, 1996
14. Stone & Webster, Inc., 2003. "Remedial Action Closure Report, Landfill Remediation & Restoration Sites (AOCs 9, 11, 40, 41, & SAs 12 & 13)"; Prepared for the U.S. Department of the Army, Corps of Engineers, New England Division, September.
15. Stone & Webster, Inc., 2003. "Remedial Action Closure Report Consolidation Landfill"; Prepared for the U.S. Department of the Army, Corps of Engineers, New England Division, September.
16. Human Factors Applications, 1996. "Removal Action Report, Vol. I, Ordinance, Ammunition, & Explosives Removal Action, Prepared for the U.S. Department of the Army, Corps of Engineers, Engineering and Support Center, Huntsville, October.

ENCLOSURE 3

FINDING OF SUITABILITY TO TRANSFER LEASE PARCELS A2A, A4, & A8 FORT DEVENS, MASSACHUSETTS

TABLE 1
PROPERTY DESCRIPTIONS and ECP CATEGORIES

Property Descriptions And ECP Categories						
EBS Parcels	Area/Name	Associated Buildings/Facilities	Size (In Acres)	Original ECP Category & Designation	Reason For Changing ECP Category	Revised ECP Category
Lease Parcel A2A	North Post Landfill (AOC 9)	None	18.5	Leasable	Protection of human health and the environment have been achieved by the removal of on-site debris in 2001 and confirmation of site conditions during a Site Investigation in 1996. All remedial actions necessary to protect human health and the environment have been completed. A certificate of closure has been issued by EPA on 30 Sep 2003.	4
Lease Parcel A4	Cold Spring Brook Land fill AOC 40	None	16.0	Leasable	Protection of human health and the environment have been achieved by the removal and disposal off site of soils with constituent concentrations above standards set in the 1999 ROD identified during the 1993 Remedial Investigation. All remedial actions necessary to protect human health and the environment have been completed. A certificate of closure has been issued by EPA on 30 Sep 2003.	4
A8	Lake George Street Landfill (SA 13)	None	9.7	Leasable	Protection of human health and the environment have been achieved by the removal of on-site debris and confirmation of site conditions during a Site Investigation in 1995. All remedial actions necessary to protect human health and the environment have been completed. A certificate of closure has been issued by EPA on 30 Sep 2003.	4
Notes: 1 - ECP Category Descriptions: Category 1. - areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas). However, the area may have been used to store hazardous substances or petroleum products; Category 2. - areas where only a release or disposal of petroleum products and/or their derivatives has occurred (including migration of petroleum products from adjacent areas); Category 3. - areas where a release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action; Category 4. - areas where a release, disposal, and/or migration of hazardous substances has occurred, and all remedial actions necessary to protect human health and the environment have been taken; Category 5. - areas where a release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are underway but all required remedial actions have not yet taken place; Category 6. - areas where a release, disposal, and/or migration of hazardous substances has occurred, but required actions have not yet been implemented; Category 7. - areas that are not evaluated or require additional evaluation						

ENCLOSURE 4

**FINDING OF SUITABILITY TO TRANSFER
LEASE PARCELS A2A, A4, & A8
FORT DEVENS, MASSACHUSETTS**

**NOTIFICATION of PETROLEUM PRODUCTS, STORAGE, RELEASE, OR
DISPOSAL**

TABLES 2a, 2b AND 2c



Table 2a-2f.doc

AND

**NOTIFICATION OF HAZARDOUS SUBSTANCE STORAGE, RELEASE, OR
DISPOSAL**

TABLES 2d, 2e AND 2f



Table 2a-2f.doc

TABLE 2a

NOTIFICATION of PETROLEUM PRODUCTS, STORAGE, RELEASE, OR DISPOSAL

Finding of Suitability To Transfer

Devens, MA

Lease Parcel A2A (AOC9), North Post Landfill

Site	Hazardous Substance Environmental Concern	Disposal Storage Release	Quantity	Dates	CASRN No.	RCRA Waste No.	Site Status Apply to entire site
AOC 9	1. Waste oil, 5-gallon cans 2. Poly-Aromatic Hydrocarbons	Disposal Media affected: Soil, GW	1. Unknown 2. 15,500 Soil 3. >MCP 4. GW-1 Standards	1950 to 1970 Observed	Unknown	Unclassified	FS Complete 1995 ROD Signed 7/1999 Wood, concrete, tires, steel, gravel recycled 88,870 cy placed & compacted into consolidated landfill 5/2002 to 9/2002

Notes: CASRN=Chemical Abstracts Registration Number ROD=Record of Decision Document FS=Feasibility Study

TABLE 2b

**NOTIFICATION of PETROLEUM PRODUCTS, STORAGE, RELEASE, OR DISPOSAL
Finding of Suitability To Transfer
Devens, MA
Lease Parcel A4, Cold Spring Brook Landfill**

Site	Hazardous Substance Environmental Concern	Disposal Storage Release	Quantity	Dates apply to all substances	CASRN No.	RCRA Waste No.	Site Status apply to entire site
AOC40	1. Semi-Volatile Organic Compounds	Disposal Media affected: Soil, Sediment, and GW	1. Unknown 2. 15,500 Soil 3. >MCP 4. GW-1 Standards	1965 to 1980	Unknown	Unclassified	RI 1993 FS Complete 1995 ROD Signed 7/1999 Removal and Disposal into Consolidated Landfill 2002

Notes: CASRN=Chemical Abstracts Registration Number ROD=Record of Decision Document FS=Feasibility Study

TABLE 2c

**NOTIFICATION of PETROLEUM PRODUCTS, STORAGE, RELEASE, OR DISPOSAL
Finding of Suitability To Transfer
Devens, MA**

Lease Parcel A8 (SA 13), Lake George Street Landfill

Site	Hazardous Substance Environmental Concern	Disposal Storage Release	Quantity	Dates apply to all substances	CASRN No.	RCRA Waste No.	Site Status apply to entire site
SA 13	1. Waste oil, 5-gallon cans	Disposal Media affected: Soil	1. Unknown 2. 15,500 Soil 3. >MCP 4. GW-1 Standards	1965 to 1975	Unknown	N/A	SI 9/1993 SSI 9/1994 ROD Signed 7/1999 Wood, concrete & steel recycled 7,749 cy placed & compacted into consolidated landfill 5/2002 to 9/2002

Notes: CASRN=Chemical Abstracts Registration Number ROD=Record of Decision Document SI=Site Investigation
SSI=Supplemental Site Investigation

TABLE 2d
NOTIFICATION of HAZARDOUS SUBSTANCE, STORAGE, RELEASE, OR DISPOSAL
Finding of Suitability To Transfer
Devens, MA
Lease Parcel A2A (AOC9), North Post Landfill

Site	Hazardous Substance Environmental Concern	Disposal Storage Release	Quantity	Dates	CASRN No.	RCRA Waste No.	Site Status Apply to entire site
AOC 9	1. Beryllium 2. Lead	Disposal Media affected: Soil, GW Soil, GW	1. Unknown 2. 15,500 Soil 3. >MCP 4. GW-1 Standards	1950 to 1970 Observed	Unknown	Unclassified	FS Complete 1995 ROD Signed 7/1999 88,870 cy placed & compacted into consolidated landfill 5/2002 to 9/2002 RCRA Lead Soils Disposed Offsite in RCRA Facility

Notes: CASERN=Chemical Abstracts Registration Number ROD=Record of Decision Document FS=Feasibility Study

TABLE 2c
NOTIFICATION of HAZARDOUS SUBSTANCE, STORAGE, RELEASE, OR DISPOSAL
Finding of Suitability To Transfer
Devens, MA

Lease Parcel A4 (AOC40), Cold Spring Brook Landfill

Site	Hazardous Substance Environmental Concern	Disposal Storage Release	Quantity	Dates apply to all substances	CASRN No.	RCRA Waste No.	Site Status apply to entire site
AOC40	1. 55 gal drums of residual antifreeze 2. bromoform 3. 1,2-dichloroethane 4. 1,1,2,2-tetrachlorethane 5. selenium 6. silver 7. arsenic 8. SVOC's 9. pesticides 10. inorganic compounds 11. explosives 12. aluminum 13. iron 14. manganese 15. sodium 16. mercury 17. zinc 18. dichlorophenol-dichloroethylene (DDE)	Disposal Media affected: Soil, Sediment, and GW	1. Unknown 2. 15,500 Soil 3. >MCP 4. GW-1 Standards	1965 to 1980	1. 1.Unknown 2. 75252 3. 107062 4. 70345 5. 778292 6. 7440224 7. unknown 8. " 9. " 10. " 11. " 12. N/A 13. " 14. " 15. " 16. 7440235 17. 7439976 18. 7440666	1. Unknown 2. U225 3. U077 4. U029 5. Unknown 6. " 7. " 8. " 9. " 10. " 11. " 12. N/A 13. " 14. " 15. " 16. Unknown 17. " 18. N/A	RI 1993 FS Complete 1995 ROD Signed 7/1999 Removal and Disposal into Consolidated Landfill 2002

Notes: CASERN=Chemical Abstracts Registration Number ROD=Record of Decision Document FS=Feasibility Study

TABLE 2f
NOTIFICATION of HAZARDOUS SUBSTANCE, STORAGE, RELEASE, OR DISPOSAL
Finding of Suitability To Transfer
Devens, MA
Lease Parcel A8 (SA 13), Lake George Street Landfill

Site	Hazardous Substance Environmental Concern	Disposal Storage Release	Quantity	Dates	CASRN No.	RCRA Waste No.	Site Status apply to entire site
SA13	Construction demolition debris, tree trunks & stumps, metal objects, and miscellaneous debris	Disposed Media affected: Soil	1. Unknown 2. 15,500 Soil 3. >MCP 4. GW-1 Standards	1965 to 1975	Unknown	N/A	SI 9/1993 SSI 9/1994 ROD Signed 7/1999 Wood, concrete & steel recycled 7,749 cy placed & compacted into consolidated landfill 5/2002 to 9/2002

Notes: CASRN=Chemical Abstracts Registration Number ROD=Record of Decision Document SI=Site Investigation

ENCLOSURE 5

FINDING OF SUITABILITY TO TRANSFER LEASE PARCEL A2A, A8, AND A4 FORT DEVENS, MASSACHUSETTS

ENVIRONMENTAL PROTECTION PROVISIONS

The following conditions, restrictions, and notifications will be placed in the deeds to ensure protection of human health and the environment and to preclude any interference with ongoing or completed remediation activities at the former Fort Devens.

Inclusion of Provisions

The person or entity to whom the property is transferred shall neither transfer the property, lease the property, nor grant any interest, privilege, or license whatsoever in connection with the property without the inclusion of the environmental protection provisions contained herein, and shall require the inclusion of such environmental protection provisions in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

NPL Property

The United States acknowledges that Fort Devens has been identified as a National Priority list ("NPL") site under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended. The Transferee acknowledges that the United States has provided it with a copy of the Fort Devens Federal Facility Agreement ("FFA") entered into by the United States Environmental Protection Agency ("EPA"), Region I and the Department of the Army, effective May 13, 1991, and will provide the Transferee with a copy of any amendments thereto. The person or entity to whom the property is transferred agrees that should any conflict arise between the terms of the FFA as they presently exist or may be amended, and the provision of this property transfer, the terms of the FFA will take precedence. The person or entity to whom the property is transferred further agrees that notwithstanding any other provisions of the property transfer, the United States assumes no liability to the persons or entity to which the property is transferred should implementation of the FFA interfere with their use of the property. The person or entity to whom the property is transferred or any subsequent transferee, shall have no claim on account of any such interference against the United States or any officer, agent, employee, or contractor thereof.

CERCLA Access Clause

In accordance with Federal Facilities Agreement, May 11, 1991 and as amended Mar 26, 1996, the Government, the Environmental Protection Agency ("EPA") and Commonwealth of Massachusetts Department of Environmental Protection and their officers, agents, employees, contractors, and subcontractors have the right, upon reasonable notice to the Transferee, to enter upon the Transferred Premises in any case in which a response action or corrective action is found to be necessary, after the date of transfer of the property, such access is necessary to carry out a response action or

corrective action on adjoining property, including, without limitation, the following purposes:

- * To conduct investigations and surveys, including, where necessary, drilling, soil and water sampling, testing-pitting, test soil borings and other activities;
- * To inspect field activities of the Government and its contractors and subcontractors;
- * To conduct any test or survey related to the environmental conditions at the Transferred Property or to verify any data submitted to the EPA or Massachusetts Department of Environmental Protection by the Government relating to such conditions;
- * To construct, operate, maintain or undertake any other response or remedial actions as required or necessary including, but not limited to monitoring wells, pumping wells and treatment facilities.

No Liability for Non-Army Contamination

Except as provided under Section 120(h) of CERCLA and the Quitclaim Deed the Army assumes no liability for additional response action or corrective action, found to be necessary after the date of transfer, in any case in which the person or entity to whom the property is transferred, or other non-Army entities, is identified as the party responsible for contamination of the property.

Use Restrictions

The DOD has undertaken careful environmental study of the property and concluded, with the Grantee's/Transferee's concurrence, that the highest and best use of the property is limited, as result of its environmental condition, to commercial and industrial uses (Lease Parcels A2a (AOC9) and A8 (SA13)) or open space and recreation uses (Lease Parcel A4 (AOC40)). In order to protect human health and the environment and further the common environmental objectives and land use plans of the United States, Massachusetts and Grantee/Transferee Massachusetts Development Finance Agency, the covenants and restrictions shall be included to assure the use of the property is consistent with environmental condition of the Property. These following restrictions and covenants benefit the lands retained by the Grantor and the public welfare generally and are consistent with state and federal environmental statutes.

Restrictions and Conditions. The Grantee /Transferee covenants for itself, its successors, and assigns not to use the Property for residential purposes unless evaluated by a Massachusetts Licensed Environmental Professional who shall render an opinion acceptable to the EPA and MDEP as to whether the proposed residential use is protective of human health, the environment, safety and public welfare and is consistent with the conclusion that no substantial hazards remain. Any and all requirements set forth by the EPA and MDEP to meet the objective of this FOST shall be satisfied before any such activity or use is commenced. The Property has been remediated in accordance with the ROD. The Grantee/Transferee, for itself, its successors or assigns covenants that it will not undertake nor allow any activity on or use of the property that would violate the restrictions contained herein. These restrictions and covenants are binding on the Grantee/Transferee, its successors and assigns; shall run with the land; and are forever enforceable. Nothing contained herein shall preclude the Grantee/Transferee from undertaking, in accordance with applicable laws and regulations and without any cost to

the Grantor, such additional remediation necessary to allow for residential use of the Property. Upon completion of such remediation required to allow residential use of the Property and upon the Grantee's/Transferee's obtaining the approval of the EPA and MDEP and, if required, any other regulatory agency, the Grantor agrees, without cost to the United States, to release or, if appropriate, modify this restriction by recordation of an amendment hereto.

Deed Notification for Property Use

1. Radon Notification

The Transferee hereby acknowledges receipt of the available radon assessment data pertaining to the former Fort Devens, which are located in the EBS. There are no structures or buildings on the Property, but the radon assessment data indicate that certain buildings at Fort Devens had levels of radon above EPA's radon reduction level of 4 picocuries/liter. A radiation induced increased risk of contracting lung cancer is the primary health concern with elevated levels of indoor radon. The Transferee acknowledges that it has had the opportunity to inspect the Property as to radon levels prior to accepting the Property. Failure of the Transferee to inspect or to be fully informed as to the radon levels of the Property and the former Fort Devens will not constitute grounds for any claim or demand against the United States. The Transferee further agrees to bear full responsibility for and discharge the Army from and against all suits, claims, demands, or actions, liabilities, judgments, costs and attorneys' fees to the extent arising out of, or in any manner predicated upon personal injury, death or property damage resulting from, related to, caused by or arising out of exposure to radon on any portion of the Property after conveyance of the Property or any future redemption or abatement of radon or the need therefore.

2. MEC Notification

The Army completed a comprehensive records search, and based on that search, has undertaken and completed statistical and physical testing of areas on the Property, if any, where the existence of munitions and explosives of concern ("MEC") was considered to be present. The term "MEC" means military munitions that may pose unique explosives safety risks, including: (A) unexploded ordnance (UXO), as defined in 10 U.S.C. 2710 (e) (9); (B) discarded military munitions (DMM), as defined in 10 U.S.C. 2710 (e) (2); or (C) explosive munitions constituents (e.g. TNT, RDX) present in high enough concentrations to pose an explosive hazard. Based upon said survey, the Army represents that, to the best of its knowledge, no MEC is currently present on the Property. Notwithstanding the survey conducted by the Army, the parties acknowledge that given the finding of potential MEC contamination on other parcels at Fort Devens, and due to the former use of the Property as part of an active military installation and training grounds, there is a possibility that MEC may exist on the Property. In the event that the Transferee, its successors and assigns, or any other person should discover any MEC on the Property, it shall not attempt to remove or destroy it, but shall immediately notify the local Police Department and Army, or Army's designated explosive ordnance representative. Personnel will be dispatched promptly to dispose of such ordnance at no expense to the Transferee.

ENCLOSURE 6

**FINDING OF SUITABILITY TO TRANSFER
LEASE PARCELS A2A, A4, & A8
FORT DEVENS, MASSACHUSETTS**

PUBLIC NOTICE AND REGULATORY COMMENTS

PUBLIC NOTICE



LegalNoticeForFOST.
pdf

REGULATORY COMMENTS


FOSTLandConSitiesco
m.rtf

FOR SALE Notice

LEGAL NOTICE

Devens Reserves Forces
Training Area
U.S. Army

PUBLIC NOTICE

The Devens RFTA Base
Realignment and Closure
(BRAC) Environmental Office
hereby announces, pursuant
to the Comprehensive Envi-
ronmental Response, Com-
pensation and Liability Act of
1980 (CERCLA) as amended
by the Superfund Amend-
ments Reauthorization Act of
1986, that the Draft Finding of
Suitability to Transfer (FST)
for Lease Purchase A2A (ACC
9), A4 (ACC 43), and A8 (SA
13) is being released for
public comment. This com-
ment period starts November
18, 2004 and extends to
December 20, 2004. Com-
ments can be sent to:

Mr. Peter Kossin

BRAC Environmental Office
30 Quebec Street, Unit 100
Devens, MA 01434-4470

This document has been
forwarded to the Massachu-
setts Department of Environ-
mental Protection (MADEP),
Federal Environmental Pro-
tection Agency (USEPA), and
the Postmaster General.
Bases (BAS). They are avail-
able at the public libraries in
Harvard, Ayer, Lancaster, and
Shirley.

November 17, 2004

A6 WEDNESDAY, NOVEMBER 17, 2004

Sentinel & Enterprise

Fitchburg-Leominster, Massachusetts
A MediaNews Group Newspaper

Fitchburg Sentinel
1838

Leominster Enterprise
1873

INCORPORATED 1873

ASA COLE, Publisher

JEFF McMENEMY, Editor

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MARK LAPRADE, Sales and Marketing Director

Volume 164, No. 323

**EPA COMMENTS ON THE DRAFT FINDING OF SUITABILITY TO TRANSFER
LEASE PARCEL: A2A (AOC9), A4 (AOC40), AND A8 (SA13)
FORT DEVENS, MASSACHUSETTS**

1. Comment: When there is a reference in the document to any Guidance, ROD or other publication please refer to the publication by full title and date.

Response: Agreed.

2. Comment: Please identify the Lease parcels by AOC number or Study Area number as well as Lease parcel number wherever mentioned in the document.

Response: Agreed.

3. Comment: Please identify the applicable ROD and date signed in the first paragraph.

Response: Agreed.

4. Comment: The DOD "Guidance" of June 1, 1994 provides on p. 5 "Before the signing of a FOST, an analysis of the intended use of the property, if known, will be conducted" including an evaluation of the environmental suitability of the property for the intended purpose and a listing of specific recommended restrictions on the use of the property, if any. What are the intended uses of the property? What is the present zoning or classification of the property under the reuse plan?

Response: Intended Property Use. On a Devens, Massachusetts map reflecting the revised zoning districts boundaries approved by the Devens Enterprise Commission on May 29, 2001, Leased Parcel A2A (AOC 9) is zoned for "Innovation & Technology Center"; Leased Parcel A4 (AOC 40) is zoned for "Open Space/Recreation"; and Leased Parcel A8 (SA 13) is zoned for "Innovation & Technology Business" The Final FOST indicates that the properties are suitable for the intended purposes.

5. Comment: Are there any remaining restrictions on the lease parcels--i.e Institutional Controls? The first paragraph states "In addition, the FOST identifies use restrictions as specified in the attached Environmental Protection Provisions necessary to protect human health or the environment after such transfer" but I only found notices rather than use restrictions. If the property is only suitable for commercial/industrial use, the FOST should identify how it will be restricted to that use.

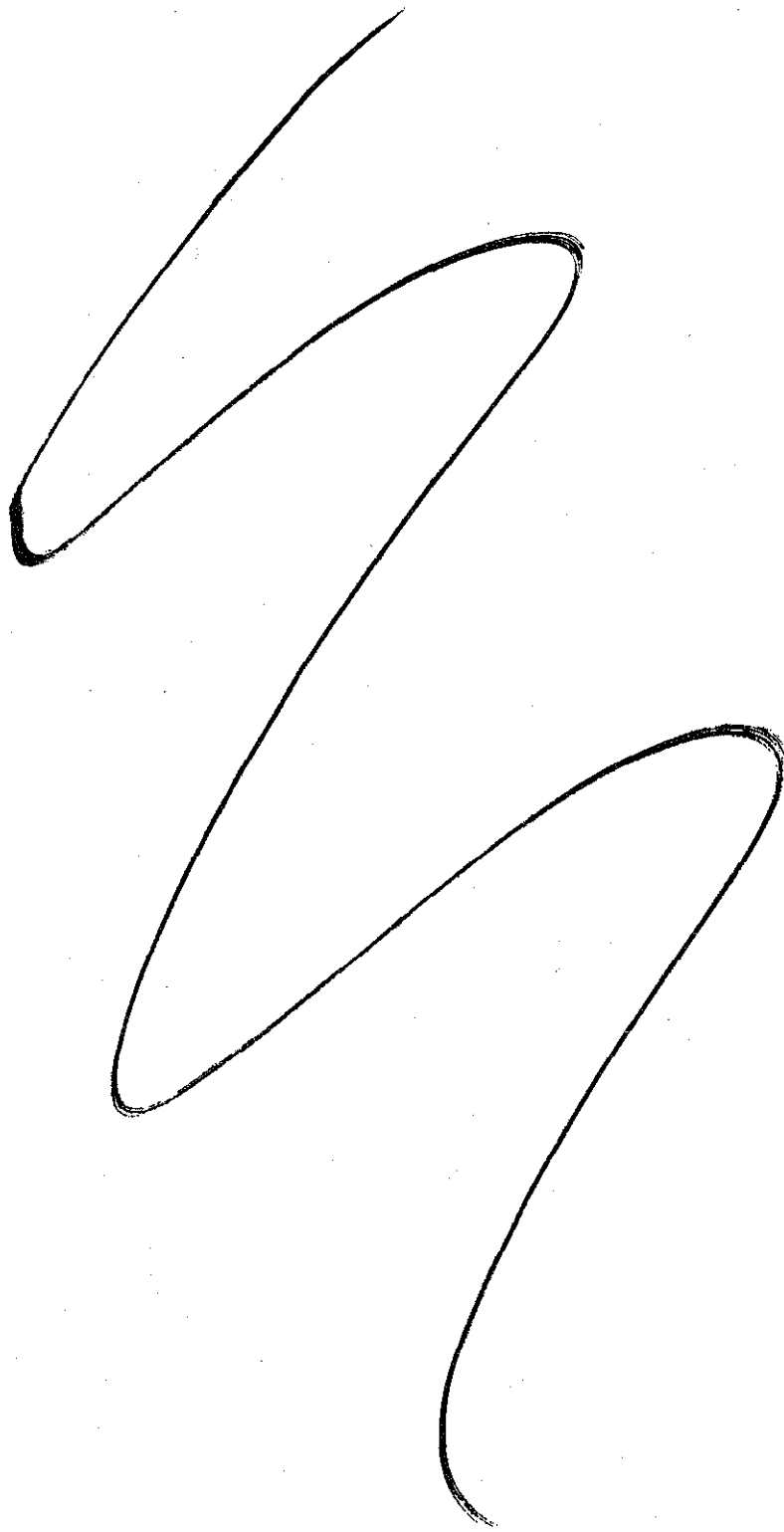
Response: The Environmental Protection Provisions indicate that residential use of the property is restricted.

6. Comment: Section 3.2.2, ¶ 1 - Please mention "soil contamination" as well as groundwater contamination.

Response: Agreed.

- 7) Comment: Please proof read document for various typographical errors.
-

Response: Agreed.



**ADDITIONAL EPA COMMENTS DATED JANUARY 31, 2005 ON
THE DRAFT FINDING OF SUITABILITY TO TRANSFER
LEASE PARCEL: A2A (AOC9), A4 (AOC40), AND A8 (SA13)
FORT DEVENS, MASSACHUSETTS**

- 1) Comment: The deed language under "Use Restrictions" (page 2 of Enclosure 5) includes a restriction against using the property for residential purposes. Consequently, the Army's response to EPA's comment #5 on the prior draft version of the FOST (page 1 of Enclosure 6), which indicates that "*There are no restrictions or institutional controls on the Leased Parcels*" should be modified to acknowledge the restriction on residential use present in the deed.

Response: The response to the previous EPA Comment #5 has been revised to indicate that the property is restricted from residential uses.

- 2) The deed language states that the residential restriction can be removed at some later date if there is some further remedial action and if the approval of the MADEP is obtained (page 3 of Enclosure 5). Modify this to include that EPA's approval should also be obtained.

Response: The text has been modified to include US EPA approval.

- 3) There are still a few typographical errors in the document that should be addressed

Response: The Final FOST has been proofread.

**MADEP COMMENTS ON THE DRAFT
FINDING OF SUITABILITY TO TRANSFER
LEASE PARCEL: A2A (AOC9), A4 (AOC40), AND A8 (SA13)
FORT DEVENS, MASSACHUSETTS**

MADEP concurs with the Draft FOST for Parcels A2A (AOC 9), A4 (AOC 40) and A8 (SA13).

ATTEST: WORC. Anthony J. Vigliotti, Register



APPENDIX C

List of Documents Reviewed

ABB Environmental Services, Inc. (ABB) 1993. *Final Remedial Investigation Addendum Report*, December.

ABB, 1994. *Supplemental Site Investigations Data Packages Groups 2 & 7, Fort Devens, Massachusetts*; January.

ABB, 1995. *Revised Final Groups 2 & 7 Site Investigation Report, Fort Devens, Massachusetts*; October.

ABB, 1996. *Revised Final Site Investigation Report – Groups 3, 5, & 6, Fort Devens, Massachusetts*, January.

Deed, 2006. Quitclaim Deed, Parcels A2A, A4, and A8, Between Defense Base Closure and Realignment Act of 1990, the United States of America, acting by and through the Department of the Army and Massachusetts Development Finance Agency. BK 38514. Pg 121. March.

Deed, 2007. Quitclaim Deed, Parcel A.15, Between United States of America, acting by and through the Department of the Army and Massachusetts Development Finance Agency. BK 50024. pg 85. July.

EA Engineering, Science, and Technology, 1999. *Design Analysis Report for Consolidation Landfill- Devens Reserve Forces Training Area*, August.

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HLA, 2000. *First Five-Year Review Report for Devens Reserve Forces Training Area*, Devens, Massachusetts. September.

HydroGeoLogic, Inc. (HGL), 2010 *Five-Year Review Report, Former Fort Devens Army Installation*, Devens, Massachusetts. September.

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M2S JV and HGL, 2015. *2014 Draft Annual Report Long-Term Monitoring Former Fort Devens Army Installation*. April.

Nobis Engineering, Inc., 2005. *2005 Five-Year Review Report, Former Fort Devens*, Devens, Massachusetts. September.

Shaw Environmental, Inc. (Shaw) 2003a. *Remedial Action Closure Report, Consolidation Landfill. Landfill Remediation Project. Devens Reserve Training Area*. Devens, Massachusetts. September.

Shaw, 2003b. *Remedial Action Closure Report, Remediation & Restoration Sites AOC 9, AOC 11, AOC 40, AOC 41, SA 12, SA 13, Other Areas*. Landfill Remediation Project. Devens Reserve Training Area. Devens, Massachusetts. September.

Sovereign and HGL, 2012. *2011 Annual Report Long-Term Monitoring Former Fort Devens Army Installation*. February.

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Sovereign and HGL, 2014. *2013 Annual Report Long-Term Monitoring Former Fort Devens Army Installation*. June.

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Stone & Webster (S&W), 2000a. *Remedy Selection Report On-Site Versus Off-Site Disposal Options, Landfill Remediation Project, Devens Reserve Training Area, Devens, Massachusetts*. March.

S&W, 2000b. *Sampling and Analysis Plan*. February.

S&W, 2002. *Habitat Restoration Work Plan – Devens Landfill Remediation Project*. January.



APPENDIX D
ARARs

TABLE B.1
SYNOPSIS OF FEDERAL AND STATE LOCATION-SPECIFIC ARARS FOR ALTERNATIVE 4C
RECORD OF DECISION
SAs 6, 12, AND 13 AND AOCs 9, 11, 40 AND 41
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
Federal	Floodplains	Floodplain Management Executive Order 11988 [40 CFR Part 6, Appendix A]	Applicable AOC 9 AOC 11 AOC 40	Requires federal agencies to evaluate the potential adverse effects associated with direct and indirect development of a floodplain. Alternatives that involve modification/construction within a floodplain may not be selected unless a determination is made that no practicable alternative exists. If no practicable alternative exists, potential harm must be minimized and action taken to restore and preserve the natural and beneficial values of the floodplain.	Drum removal and hot-spot sediment removal will be designed to minimize alteration/destruction of floodplain area. If this alternative is chosen, wetlands adversely affected by remedial action will be restored to the extent necessary.
	Wetlands	Protection of Wetlands Executive Order 11990 [40 CFR Part 6, Appendix A]	Applicable AOC 9 AOC 11 AOC 40	Under this Order, federal agencies are required to minimize the destruction, loss, or degradation of wetlands, and preserve and enhance natural and beneficial values of wetlands. If remediation is required within wetland areas, and no practical alternative exists, potential harm must be minimized and action taken to restore natural and beneficial values.	Drum removal and hot-spot sediment removal will be designed to minimize alteration/destruction of floodplain area. If this alternative is chosen, wetlands adversely affected by remedial action will be restored to the extent necessary.
	Wetlands, Aquatic Ecosystem	Clean Water Act, Dredge or Fill Requirements Section 404 [40 CFR Part 230]	Relevant and Appropriate AOC 9 AOC 11 AOC 40	Section 404 of the Clean Water Act regulates the discharge of dredged or fill materials to U.S. waters, including wetlands. Filling wetlands would be considered a discharge of fill materials. Guidelines for Specification of Disposal Sites for Dredged or Fill material at 40 CFR Part 230, promulgated under Clean Water Act Section 404(b)(1), maintain that no discharge of dredged or fill material will be permitted if there is a practical alternative that would have less effect on the aquatic ecosystem. If adverse impacts are unavoidable, action must be taken to restore, or create alternative wetlands.	The removal of drums/sediments will be designed to minimize placement or fill in wetland areas. If this alternative is chosen, the affected areas will be restored to the extent necessary.

TABLE B.1
SYNOPSIS OF FEDERAL AND STATE LOCATION-SPECIFIC ARARS FOR ALTERNATIVE 4C

RECORD OF DECISION
SAs 6, 12, AND 13 AND AOCs 9, 11, 40 AND 41
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
Federal	Surface Waters, Endangered Species, Migratory Species	Fish and Wildlife Coordination Act [16 USC 661 <u>et. seq.</u>]	Relevant and Appropriate AOC 9 AOC 11 AOC 40 SA 13	Actions that affect species/habitat require consultation with U.S. Department of Interior, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and/or state agencies, as appropriate, to ensure that proposed actions do not jeopardize the continued existence of the species or adversely modify or destroy critical habitat. The effects of water-related projects on fish and wildlife resources must be considered. Action must be taken to prevent, mitigate, or compensate for project-related damages or losses to fish and wildlife resources. Consultation with the responsible agency is also strongly recommended for on-site actions. Under 40 CFR Part 300.38, these requirements apply to all response activities under the National Contingency Plan.	To the extent necessary, action will be taken to develop measures to prevent, mitigate, or compensate for project related impacts to habitat and wildlife. The U.S. Fish and Wildlife Service, acting as a review agency for the USEPA, will be kept informed of proposed remedial actions.
	Endangered Species	Endangered Species Act [50 CFR Parts 17.11-17.12]	Applicable AOC 9 AOC 11 AOC 40 SA 13 Consolidation Facility	This act requires action to avoid jeopardizing the continued existence of listed endangered or threaten species or modification of their habitat.	The protection of endangered species and their habitats will be considered during excavation activities and cover installation.
	Atlantic Flyway, Wetlands, Surface Waters	Migratory Bird Treaty Act [16 USC 703 <u>et seq.</u>]	Relevant and Appropriate AOC 11	The Migratory Bird Treaty Act protects migratory birds, their nests, and eggs. A depredation permit is required to take, possess, or transport migratory birds or disturb their nests, eggs, or young.	Remedial actions will be performed to protect migratory birds, their nests, and eggs.

TABLE B.1
SYNOPSIS OF FEDERAL AND STATE LOCATION-SPECIFIC ARARS FOR ALTERNATIVE 4C

RECORD OF DECISION
SAs 6, 12, AND 13 AND AOCS 9, 11, 40 AND 41
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
State	Floodplains, Wetlands, Surface Waters	Massachusetts Wetland Protection Act and regulations [MGL c. 131 s. 40; 310 CMR 10.00]	Applicable AOC 9 AOC 11 AOC 40 SA 13	These regulations include standards on dredging, filling, altering, or polluting inland wetlands and protected areas (defined as areas within the 100-year floodplain). A Notice of Intent (NOI) must be filed with the municipal conservation commission and a Final Order of Conditions obtained before proceeding with the activity. A Determination of Applicability or NOI must be filed for activities such as excavation within a 100 foot buffer zone. The regulations specifically prohibit loss of over 5,000 square feet of bordering vegetated wetland. Loss may be permitted with replication of any lost area within two growing seasons.	All work to be performed within wetlands and the 100 foot buffer zone will be in accordance with the substantive requirements of these regulations.
	Endangered Species	Massachusetts Endangered Species Regulations [321 CMR 8.00]	Applicable AOC 9 AOC 11 AOC 40 SA 13 Consolidation Facility	Actions must be conducted in a manner that minimizes the impact to Massachusetts-listed rare, threatened, or endangered species, and species listed by the Massachusetts Natural Heritage Program.	The protection of state listed endangered species (in particular the Grasshopper Sparrow at the Consolidation Facility) will be considered during the design and implementation of this alternative.

Notes:

AWQC = Ambient Water Quality Criteria
CFR = Code of Federal Regulations
CMR = Code of Massachusetts Rules
CWA = Clean Water Act
DOI = Department of the Interior
FWS = Fish and Wildlife Services
MEPA = Massachusetts Environmental Policy Act
MGL = Massachusetts General Laws
NMFS = National Marine Fisheries Service
USC = United States Code

Note: A Record Notice of Landfill Operation for AOC 11 is not necessary with Alternative 4c.

TABLE B.2
SYNOPSIS OF FEDERAL AND STATE CHEMICAL-SPECIFIC ARARS FOR ALTERNATIVE 4C

RECORD OF DECISION
SAs 6, 12, AND 13 AND AOCs 9, 11, 40 AND 41
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
Federal	Surface water	Clean Water Act, Ambient Water Quality Criteria [40 CFR 131; Quality Criteria for Water 1986]	Relevant and Appropriate AOC 11 AOC 40	Federal Ambient Water Quality Criteria (AWQC) include (1) health-based criteria development for 95 carcinogenic and noncarcinogenic compounds and (2) acute and chronic toxicity values for the protection of aquatic life. AWQC for the protection of human health provide protective concentrations for exposure from ingesting contaminated water and contaminated aquatic organisms, and from ingesting contaminated aquatic organisms alone. Remedial actions involving contaminated surface water or discharge of contaminants to surface water must consider the uses of the water and the circumstances of the release or threatened release.	Remedial actions will be performed in a manner to prevent AWQC exceedances in surface water. Activities at AOC 11 will be performed to prevent AWQC exceedances in the Nashua River. Removal of sediment at AOC 40 will be performed in a manner to prevent AWQC exceedances in Cold Spring Brook Pond. Supernatant from dredged spoil will be monitored to prevent AWQC exceedances in Cold Spring Brook Pond.
	Groundwater	Safe Drinking Water Act, National Primary Drinking Water Regulations, MCLs and MCLGs (40 CFR Parts 141.60 - 141.63 and 141.50 - 141.52]	Relevant and Appropriate AOC 40	The National Primary Drinking Water Regulations establish Maximum Contaminant Levels (MCLs) and Maximum Contaminant Level Goals (MCLGs) for several common organic and inorganic contaminants. MCLs specify the maximum permissible concentrations if contaminants in public drinking water supplies. MCLs are federally enforceable standards based in part on the availability and cost of treatment techniques. MCLGs specify the maximum concentration at which no known or anticipated adverse effect on humans will occur. MCLGs are non-enforceable health based goals set equal to or lower than MCLs.	At AOC 40 the MCL for bis(2-ethylhexyl) phthalate will be met under average scenario, and the MCL for arsenic will be met under average and maximum scenario. MCLs are not exceeded at Patton Well.

TABLE B.2
SYNOPSIS OF FEDERAL AND STATE CHEMICAL-SPECIFIC ARARS FOR ALTERNATIVE 4C

RECORD OF DECISION
SAs 6, 12, AND 13 AND AOCs 9, 11, 40 AND 41
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
State	Surface water	Massachusetts Surface Water Quality Standards [314 CMR 4.00]	Relevant and Appropriate AOC 11 AOC 40	Massachusetts Surface Water Quality Standards designate the most sensitive uses for which surface waters of the Commonwealth are to be enhanced, maintained, and protected, and designate minimum water quality criteria for sustaining the designated uses. Surface waters at Fort Devens are classified as Class B. Surface waters assigned to this class are designated as habitat for fish, other aquatic life and wildlife, and for primary and secondary contact recreation. These criteria supersede federal AWQC only when they are more stringent (more protective) than the AWQC.	At AOC 11 activities will be performed in a manner to prevent exceedances of surface water quality in the Nashua River. At AOC 40 sediment removal will be performed in a manner to prevent exceedances of Surface Water Quality Standards in Cold Spring Brook Pond. Supernatant from dredged spoil dewatering will be monitored to prevent exceedances in the pond. To the extent necessary, Surface Water Quality Standards will be used to develop discharge limitations.
	Groundwater	Massachusetts Groundwater Quality Standards [314 CMR 6.00]	Relevant and Appropriate AOC 40	These standards designate and assign uses for which groundwaters of the Commonwealth shall be maintained and protected, and set forth water quality criteria necessary to maintain the designated uses. Groundwater at Fort Devens is classified as Class I, fresh groundwaters designated as a source of potable water supply.	At AOC 40 the MCL for bis(2-ethylhexyl)phthalate will be met under average scenario, and the MCL for arsenic will be met under average and maximum scenario. MCLs are not exceeded at Patton Well.
	Groundwater	Massachusetts Drinking Water Regulations [310 CMR 22.00]	Relevant and Appropriate AOC 40	These regulations list Massachusetts MCLs which apply to drinking water distributed through a public water system.	At AOC 40 the MCL for bis(2-ethylhexyl)phthalate will be met under average scenario, and the MCL for arsenic will be met under average and maximum scenario. MCLs are not exceeded at Patton Well.

Notes:

AWQC = Ambient Water Quality Criteria
CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act
CFR = Code of Federal Regulations
CMR = Code of Massachusetts Rules
CWA = Clean Water Act
MCL = Maximum Contaminant Rules
MCLG = Maximum Contaminant Level Goal
MMCL = Massachusetts Maximum Contaminant Level
NPDWR = National Primary Drinking Water Regulations
SDWA = Safe Drinking Water Act
SMCL = Secondary Maximum Contaminant Level

Note: A Record Notice of Landfill Operation for AOC 11 is not necessary with Alternative 4c.

TABLE B.3
SYNOPSIS OF FEDERAL AND STATE ACTION-SPECIFIC ARARS FOR ALTERNATIVE 4C

RECORD OF DECISION
SAs 6, 12, AND 13 AND AOCS 9, 11, 40 AND 41
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
Federal	Construction over/in navigable waters	Rivers and Harbors Act of 1899 [33 USC 401 <u>et seq.</u>]	Relevant and Appropriate AOC 40 AOC 11	Section 10 of the Rivers and Harbors Act of 1899 requires an authorization from the Secretary of the Army, acting through the U.S. Army Corps of Engineers (USACE), for the construction of any structure in or over any "navigable water of the U.S."; the excavation from or deposition of material in such waters, or any obstruction of alteration in such waters.	Excavating, filling, and disposal activities will be conducted to meet the substantive criteria and standards of these regulations.
	Control of surface water runoff, Direct discharge to surface water	Clean Water Act NPDES Permit Program [40 CFR 122, 125]	Relevant and Appropriate AOC 9 AOC 11 AOC 40 SA 13 Consolidation Facility	The National Pollutant Discharge Elimination System (NPDES) permit program specifies the permissible concentration or level of contaminants in the discharge from any point source, including surface runoff, to waters of the United States.	Construction activities will be controlled to meet USEPA discharge requirements. On-site discharge will meet the substantive requirements of these regulations.
	Land Disposal of Hazardous Wastes	Resource Conservation and Recovery Act (RCRA), Land Disposal Restrictions (LDRs); (40 CFR Part 268)	Applicable AOC 9 AOC 11 AOC 40 SA 13	Land disposal of RCRA hazardous wastes without specified treatment is restricted. Remedial actions must be evaluated to determine if they constitute "placement" and if LDRs are applicable. The LDRs require that wastes must be treated either by a treatment technology or to a specific concentration prior to disposal in a RCRA Subtitle C permitted facility.	If it is determined that materials excavated from AOCs 9, 11, 40, or SA 13 are hazardous materials subject to LDRs, the materials will be handled and disposed of in compliance with these regulations.
	Disposal of PCB-contaminated wastes	Toxic Substance Control act Regulations [40 CFR Part 761]	Applicable AOC 9 AOC 11 AOC 40 SA 13	Establish prohibitions of and requirements for the manufacturing, processing, distribution in commerce, use, disposal, storage and marking of PCB items. Sets forth the "PCB Spill Cleanup Policy."	If it is determined that materials excavated from AOCs 9, 11, 40 or SA 13 are contaminated with PCBs at concentrations of 50 ppm or greater, the materials will be handled and disposed of in compliance with these regulations.
State	Solid Waste Landfill Siting	Massachusetts Solid Waste Facilities Site Regulations [310 CMR 16.00]	Applicable Consolidation Facility	These regulations outline the requirements for selecting the site of a new solid waste landfill for the Commonwealth of Massachusetts.	The consolidation facility will be sited in accordance with these regulations.

TABLE B.3
SYNOPSIS OF FEDERAL AND STATE LOCATION-SPECIFIC ARARS FOR ALTERNATIVE 4C

RECORD OF DECISION
SAs 6, 12, AND 13 AND AOCs 9, 11, 40 AND 41
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
State	Solid Waste Landfill Construction, Operation, Closure, and Post-Closure Care	Massachusetts Solid Waste Management Regulations [310 CMR 19.000]	Relevant and Appropriate AOC 9, AOC 11, SA 12, SA 13 Consolidation Facility	These regulations outline the requirements for construction, operation, closure, and post closure at solid waste management facilities in the Commonwealth of Massachusetts.	Final closure and post-closure plans will be prepared and submitted to satisfy the requirements of 310 CMR 19.021 for AOCs 9, 11, and 40, and SAs 12 and 13. The consolidation landfill will be constructed, operated, and closed in conformance with the regulations at 310 CMR 19.000. A Record Notice of Landfill Operation will be filed for AOC 11 in accordance with 310 CMR 19.141.
	Activities that potentially affect surface water quality	Massachusetts Water Quality Certification and Certification for Dredging [314 CMR 9.00]	Relevant and Appropriate AOC 40	For activities that require a MADEP Wetlands Order of Conditions to dredge or fill navigable waters or wetlands, a Chapter 91 Waterways License, a USACE permit or any major permit issued by USEPA (e.g., Clean Water Act NPDES permit), a Massachusetts Division of Water Pollution Control Water Quality Certification is required pursuant to 314 CMR 9.00.	Excavation, filling, and disposal activities will meet the substantive criteria and standards of these regulations. Remedial activities will be designed to attain and maintain Massachusetts Water Quality Standards in affected waters.
	Activities that affect ambient air quality	Massachusetts Air Pollution Control Regulations [310 CMR 7.00]	Applicable AOC 9 AOC 11 AOC 40 SA 13 Consolidation Facility	These regulations pertain to the prevention of emissions in excess of Massachusetts ambient air quality standards.	Remedial activities will be conducted to meet the standards for Visible Emissions (310 CMR 7.06); Dust, Odor, Construction and Demolition (310 CMR 7.09); Noise (310 CMR 7.10); and Volatile Organic Compounds (310 CMR 7.18).

Notes:

CFR = Code of Federal Regulations
CMR = Code of Massachusetts Rules
CWA = Clean Water Act
MADEP = Massachusetts Department of Environmental Protection
MGL = Massachusetts General Laws
NPDES = National Pollutant Discharge Elimination System
RCLA = Comprehensive Environmental Response, Compensation, and Liability Act
USACE = U.S. Army Corps of Engineers
USC = United States Code

Note: A Record Notice of Landfill Operation for AOC 11 is not necessary with Alternative 4c.

SYNOPSIS OF FEDERAL AND STATE LOCATION-SPECIFIC ARARS FOR ALTERNATIVE 4C
THAT WERE REVISED SINCE THE RECORD OF DECISION

SAs 9, 11, 40
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
Federal	Floodplains	Floodplain Management, 44 CFR 9, Executive Order 11988	Applicable AOC 9 AOC 11 AOC 40	Federal Emergency Management Agency regulations that set forth the policy, procedure and responsibilities to implement and enforce Executive Order 11988, Floodplain Management.	Drum removal and hot-spot sediment removal was designed to minimize alteration/destruction of floodplain area. Wetlands adversely affected by remedial action were restored to the extent necessary.
	Wetlands	Protection of Wetlands, 44 CFR 9, Executive Order 11990	Applicable AOC 9 AOC 11 AOC 40	Under this Order, as implemented through 44 CFR 9, federal agencies are required to minimize the destruction, loss, or degradation of wetlands, and preserve and enhance natural and beneficial values of wetlands. If remediation is required within wetland areas, and no practical alternative exists, potential harm must be minimized and action taken to restore natural and beneficial values.	Drum removal and hot-spot sediment removal was designed to minimize alteration/destruction of floodplain area. Wetlands adversely affected by remedial action were restored to the extent necessary.

2015 FIVE YEAR REVIEW ADDENDUM

Devens Consolidated Landfill Contributor Sites

AOC 9, 40 and SA 13

Former Fort Devens Army Installation

Devens, Massachusetts

Contract No.: W912WJ-15-C-0002

Prepared for:



**Army Base Realignment and Closure Division
US Army Garrison Fort Devens**



**US Army Corps of Engineers
New England District
Concord, Massachusetts**

June 2019

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2015 FIVE YEAR REVIEW ADDENDUM

Devens Consolidated Landfill Contributor Sites

AOC 9, 40 and SA 13

Former Fort Devens Army Installation
Devens, Massachusetts

Prepared for:

**ARMY BASE REALIGNMENT AND CLOSURE DIVISION
US ARMY GARRISON FORT DEVENS**

**US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS**

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Robert J. Simeone

BRAC Environmental Coordinator, Devens
Army Base Realignment and Closure Division

6/26/2019

Date

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LIST OF ATTACHMENTS

Attachment A Figures

- Figure 1 Devens Consolidation Landfill (DCL) Contributor Site Locations
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Attachment B CADD Drawings of Original Site Maps

Attachment C Site Inspections and Photographs Documenting Site Conditions at the DCL Contributor Sites

LIST OF APPENDICES

Appendix A Responses to Comments

Appendix B Institutional Control Instruments - Quit Claim Deed-Parcels A2A, A4, and A8 (dated 03/07/2006)

Appendix C List of Documents Reviewed

Appendix D ARARs

D-1 ARARs from the ROD

D-2 ARARs revised after the ROD

LIST OF ABBREVIATIONS AND ACRONYMS

AOC	Area of Contamination
ARAR	Applicable, Relevant, and Appropriate Requirement
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Restoration, Compensation, and Liability Act
cy	cubic yard
DCL	Devens Consolidated Landfill
DDD	dichlorodiphenyldichloroethane
FS	Feasibility Study
ft	Feet
IC	Institutional Control
LTM	Long-Term Monitoring
MassDEP	Massachusetts Department of Environmental Protection
MCP	Massachusetts Contingency Plan
mg/Kg	milligrams per kilogram
NPL	National Priorities List
µg/L	micrograms per liter
O&M	operation & maintenance
PAH	polycyclic aromatic hydrocarbons
PRG	preliminary remediation goals
RI	remedial investigation
ROD	record of decision
SA	study area
SI	site inspection
SPIA	South Post Impact Area
SVOC	semi-volatile organic compounds
USEPA	U.S. Environmental Protection Agency
UU/UE	unlimited use/unrestricted exposure
TPH	total petroleum hydrocarbons
VOC	volatile organic compound

EXECUTIVE SUMMARY

KOMAN Government Solutions, LLC, has prepared this addendum to the *2015 Five-Year Review Report, for Former Fort Devens Army Installation, Base Realignment and Closure (BRAC) Legacy Sites, Devens, Massachusetts* [H&S Environmental, Inc. (H&S), 2015] to address three contributor sites to Devens Consolidation Landfill (DCL): Area of Contamination (AOC) 9, AOC 40, and Study Area (SA) 13. This Addendum was completed in accordance with the U.S. Environmental Protection Agency (USEPA) Comprehensive Five-Year Review Guidance, dated June 2001.

DCL and Contributor Sites: In addition to the Consolidation Landfill, the DCL includes the seven contributor sites that were former landfills and debris disposal areas and a former housing area at the former Fort Devens. The seven DCL contributor sites include:

- SA 12: A half-acre location where construction debris and yard waste were deposited [approximately 8,700 cubic yards (cy)];
- SA 13: A one-acre area used from 1965 to the mid-1990s for yard-waste (approximately 10,000 cy);
- AOC 9: An area used for storing wood, concrete, asphalt, metal, brick, glass, and tree stumps (approximately 121,000 cy);
- AOC 11: A former landfill used from 1975 to 1980 for disposal of wood-frame hospital demolition debris (approximately 35,000 cy);
- AOC 40: Four acres used for construction debris, ash, stumps, and logs (approximately 125,400 cy);
- AOC 41: A one quarter-acre landfill in the South Post Impact Area (SPIA) that was used up to the 1950s for disposal of non-explosive material and household debris (approximately 1,500 cy); and
- Housing areas Grant, Locust, and Cavite: Soils contaminated with volatile organics or pesticides and walling material contaminated with volatiles or pesticides (approximately 2,290 tons of soil and approximately 1,240 tons of concrete).

This Addendum is focused on three of the seven contributor sites: SA 13, AOC 9 and AOC 40. AOC 41 is inclusive of the SPIA and is discussed in the SPIA portion of the five-year review. As per the record of decision (ROD), the remediation of contributor sites AOC 41 and SA 12 were considered non-Comprehensive Environmental Restoration, Compensation, and Liability Act (CERCLA) actions and are not subject to five-year site review requirements. In 2005, the Army provided clarification to the USEPA indicating that AOC 11 was remediated to allow for unrestricted use. Based on the clarifications to the USEPA, Institutional Controls (IC) and five-year site reviews were no longer needed for AOC 11.

The USEPA approved the ROD for landfill remediation of the first six areas in July 1999. The selected remedies included provisions for either on-site or off-site disposal options. The approved remedial alternative documented in the 1999 ROD called for limited removal at SA 12 and AOC 41 and full excavation of AOCs 9, 11, 40 and SA 13. The on-site landfill construction alternative was selected as the preferred alternative. Construction of the DCL commenced in September 2000 and was completed in November 2002. The remedial action closure reports for the contributor sites and for the landfill [Shaw Environmental, Inc. (Shaw), 2003a and b], were accepted by USEPA and Massachusetts Department of Environmental Protection (MassDEP), certifying that the DCL was constructed and capped in accordance with the ROD, and met the performance standards and/or remedial response objectives in the ROD. The remedy in place at the DCL is functioning as intended and continues to be protective of human health and the environment.

Construction activities at the associated contributor sites (AOC 9, AOC 40, and SA 13) are complete. Contributor sites AOC 9, AOC 40, and SA 13 were transferred from the Army to MassDevelopment in

March 2006. Institution controls were incorporated into the quitclaim deed for parcels A2A (AOC 9), A8 (SA 13), and A4 (AOC 40) to prevent residential development of the properties. Due to the ICs placed in the quitclaim deed, these three contributor sites were then subject to five-year site reviews.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Former Fort Devens Army Installation		
EPA ID: MA7210025154		
Region: Region 1	State: MA	City/County: Devens/Middlesex & Worcester
SITE STATUS		
NPL Status: Final		
Multiple OUs? Yes	Has the site achieved construction completion? No	
REVIEW STATUS		
Lead agency: Other Federal Agency If “Other Federal Agency” was selected above, enter Agency name: US Army Base Realignment and Closure (BRAC) Environmental Office, Devens, MA		
Author name (Federal or State Project Manager): Not Applicable		
Author affiliation: Not Applicable		
Review period: January 2015 – June 2015		
Date of site inspection: August 19, 2016 (occurred after review period due to misunderstanding of requirement to include the Devens Consolidation Landfill (DCL) Contributor sites (AOC 9, AOC 40, and SA 13) in the 2015 Devens five-year review.		
Type of review: Statutory		
Review number: 4		
Triggering action date: September 26, 1995		
Due date (five years after triggering action date): September 26, 2000 (and every five years thereafter)		

Issues:

While no issues affecting short-term protectiveness of the remedy selected for three DCL Contributor Sites AOC9, AOC40, and SA13 were identified in this (2015) Devens Five-Year Review Addendum, the ARARs assessment is not yet complete. An analysis of each of the ARARs and TBCs (i.e., exposure assumptions, toxicity data, cleanup levels and remedial action objectives) included in the 1999 ROD must be conducted in the next (2020) Devens five-year review to ensure protectiveness of the remedy in the long-term.

Recommendations and Follow-up Actions:

Although this (2015) Devens Five-Year Review Addendum did not identify issues affecting current protectiveness of the remedy for the DCL Contributor Sites, Army must complete its ARARs assessment to ensure protectiveness in the long-term. Specifically, Army has agreed to assess each of the ARARs and TBCs (i.e., exposure assumptions, toxicity data, cleanup levels and remedial action objectives) included in the 1999 ROD as part of the next (2020) Devens five-year review to confirm that post-ROD

changes to these standards and TBCs, if any, would/do not affect the protectiveness determination for the remedy(s) selected for the DCL and the DCL Contributor Sites.

In addition, Army may prepare an updated baseline risk assessment for regulatory review and concurrence to evaluate attainment of unlimited use/unrestricted exposure (UU/UE) cleanup goals and support removal of ICs prohibiting residential use of these properties.

Finally, in accordance with amended floodplain management and wetland protection regulations (44 C.F.R. 9, Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Protection of Wetlands)), Army will ensure protection of wastes left in place within a floodplain by monitoring, managing and repairing, if necessary, rip-rap and/or soil covers up to the 500-year flood elevation. The amended floodplain regulations (*see* Appendix D-2) will also be discussed and more thorough evaluated as part of the next (2020) Devens five-year review.

Protectiveness Statement(s):

There are no LTM or O&M requirements in place for the DCL contributor sites, AOC 9, AOC 40, and SA13. Per requirements set forth in the 1999 ROD, 2006 transfer deed and the Devens Reuse Plan, annual site inspections of the DCL contributor sites confirmed that these areas are not currently used, or under consideration for being used, for residential purposes.

The remedy at the DCL contributor sites is Short-Term Protective. The remedy currently protects human health and the environment because institutional controls are enforced, and no exposures are occurring or imminent. However, for the remedy to be protective in the long-term, Army must complete its ARARs assessment in the next (2020) Devens five-year review in accordance with CERCLA, the NCP and EPA's five-year review guidance to ensure protectiveness. Army has agreed to build upon the preliminary work conducted as part of this (2015) Devens Five-Year Review Addendum and complete its ARARs assessment in the next (2020) Devens five-year review.

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1.0 INTRODUCTION

KOMAN Government Solutions, LLC, has prepared this Addendum to the 2015 Five-Year Review Report, for Former Fort Devens Army Installation, Base Realignment and Closure (BRAC) Legacy Sites, Devens, Massachusetts (H&S, 2015) to address three Devens Consolidation Landfill (DCL) contributor sites that have Institutional Controls (IC) in place: Area of Contamination (AOC) 9, AOC 40, and Study Area (SA) 13. This Addendum is required because hazardous substances, pollutants or contaminants remain at these sites above levels that allow for unlimited use and unrestricted exposure (UU/UE) but were inadvertently excluded from the DCL evaluation in the 2015 Devens Five-Year Review Report (H&S, 2015).

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2.0 SITE CHRONOLOGY

The site chronology presented in Table 1 includes the dates of major events at the DCL contributor sites.

Table 1
Chronology of Events DCL Contributor Sites

Event	Date
Fort Devens Final National Priorities List (NPL) listing	November 1989
Fort Devens/U.S. Environmental Protection Agency (USEPA) signed a Federal Facilities Agreement (FFA) establishing a timetable for implementing clean-up activities	November 1991
Enhanced Preliminary Assessment	1992
Landfill Consolidation Feasibility Study (FS) Report	September 1995
Contributor Sites (SA 6, SA 12, SA 13, AOC 9, AOC 11, AOC 40, and AOC 41) Site Inspections/Remedial Investigations	1994-1996
Landfill Remediation FS Report	January 1997
Off-site disposal evaluated	Spring/Summer 1998
Landfill Remediation FS Addendum Report	November 1998
Second Proposed Plan issued describing the Army's Alternative 4C as the preferred option	December 1998
Record of Decision (ROD) signed	July 1999
First Five-Year Statutory Review	September 2000
Commenced Landfill Construction	September 25, 2000
Mobilized at AOCs 11 and 40, and SAs 12 and 13	October 2000
Mobilized at AOC 9	January 2001
Easement Agreement Tract No. 400E between MassDevelopment and Army)	June 2001
Work completed at AOCs 11 and SA 13	May 2002
Landfill cap construction completed; work completed at AOC 40	November 2002
Work completed at AOC 9	December 2002
Operation and Maintenance (O&M) activities at landfill and remedial sites begins	July/August 2003
Remedial action complete. Closure Report	October 2003
Second Five-Year Statutory Review for the Former Fort Devens	September 2005
AOC 9, AOC 40, and SA 13 transferred to MassDevelopment via Quitclaim Deed	March 2006
Third Five-Year Review for the Former Fort Devens	September 2010
Fourth Five-Year Review for the Former Fort Devens	September 2015

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3.0 BACKGROUND

3.1 Physical Characteristics

Seven contributor sites were considered for consolidation in the DCL (Attachment A, Figure 1) these sites consisted of two SAs, four AOCs, and one pesticide removal project at three Fort Devens housing areas. The DCL (Attachment A, Figure 2) is discussed in detail in Section 3 the 2015 Devens Five-Year Review Report (H&S, 2015). This Addendum is focused on three of the seven contributor sites: SA 13, AOC 9 and AOC 40.

Descriptions of the seven contributor sites are presented below:

- SA 12: A half-acre location where construction debris and yard waste were deposited [approximately 8,700 cubic yards (cy)];
- SA 13: A one-acre area used from 1965 to the mid-1990s for yard-waste (approximately 10,000 cy);
- AOC 9: An area used for storing wood, concrete, asphalt, metal, brick, glass, and tree stumps (approximately 121,000 cy);
- AOC 11: A former landfill used from 1975 to 1980 for disposal of wood-frame hospital demolition debris (approximately 35,000 cy);
- AOC 40: Four acres used for construction debris, ash, stumps, and logs (approximately 125,400 cy);
- AOC 41: A one quarter-acre landfill in the South Post Impact Area (SPIA) that was used up to the 1950s for disposal of non-explosive material and household debris (approximately 1,500 cy); and
- Housing areas Grant, Locust, and Cavite: Soils and walling materials contaminated with volatile organic compounds (VOC) or pesticides (approximately 2,290 tons of soil and 1,240 tons of concrete).

Section 3.3 provides a summary of the DCL contributor sites that were transferred from Army control to the MassDevelopment for redevelopment and retain deed-recorded restrictions precluding the property to be used for residential purposes. These sites include AOC 9, 40, and SA 13, which are the subject of this Addendum. AOC 41 is inclusive of the SPIA and is discussed in the SPIA portion of the 2015 Devens Five-Year Review Report. As per the record of decision (ROD), the remediation of contributor sites AOC 41 and SA 12 were considered non- Comprehensive Environmental Restoration, Compensation, and Liability Act (CERCLA) actions and are not subject to five-year site review requirements. In 2005, the Army provided clarification to the USEPA indicating that AOC 11 was remediated to allow for unrestricted use. Based on the clarifications to the USEPA, Institutional Controls (IC) and five-year site reviews were no longer needed for AOC 11.

The USEPA approved the ROD for landfill remediation of the first six areas in July 1999. It included provisions for either on-site or off-site disposal options. The on-site landfill construction alternative was selected as the best option. Construction of the DCL commenced in September 2000 and was completed in November 2002. The remedial action closure reports for the contributor sites and the landfill (Shaw, 2003a and b) were accepted, certifying that the DCL was constructed and capped in accordance with the ROD, and met the performance standards and/or response objectives in the ROD. Long-term monitoring (LTM) activities have been performed at the DCL since the completion of the landfill construction.

MassDevelopment maintains ownership of the DCL property and agreed to grant the Army a permanent easement to build and operate the landfill (Easement Agreement Track No. 400E, June 2001). The easement additionally details the Institutional Controls (IC) between the Army and MassDevelopment for the DCL. The 1999 ROD had indicated ICs “were planned for the proposed Consolidation Landfill”. DCL ICs have been evaluated through annual IC inspections, which are conducted per the Land-Use Control

Implementation and Monitoring Plan included in the Long-Term Monitoring and Maintenance Plan [Sovereign/HydroGeoLogic, Inc. (HGL), 2015].

3.2 Land and Resource Use

Devens zoning at AOC 9 indicates Environmental Business zone. AOC 9 is currently undeveloped. AOC 40, a reconstructed wetland unsuitable for redevelopment, is in Open Space/Recreational areas. SA 13 is within the Innovation & Technology Business zone. The location is a shrub swamp and development of this area is not likely. AOC 9, AOC 40, and SA 13 currently remain undeveloped and are either in the Environmental Business zone, Innovation & Technology Business zone, or in Open Space/Recreational area.

3.3 History of Contamination

The following sections provide a summary of three of the seven DCL contributor sites, AOC 9, AOC 40, and SA 13, which are the subject of this Addendum. These sites were transferred from Army control to MassDevelopment for redevelopment and retain deed-recorded restrictions prohibiting the property to be used for residential purposes.

AOC 9

AOC 9 was located on the former North Post, north of Walker Road and west of the wastewater treatment plant. The landfill was operated from the late 1950s until 1978 and was used by the Army, National Guard, site contractors, and off-post personnel. Landfill materials at AOC 9 were generally demolition debris, including wood, concrete, asphalt, metal, brick, glass, and tree stumps. Debris volume was estimated to be 112,000 cy.

A geophysical survey was performed during the 1996 Site Investigation (SI) to supplement information derived from evaluation of aerial photographs and to delineate the actual limits of the landfill. The results of the survey assisted in the placement of test pits and groundwater monitoring wells and provided insight into the distribution of landfill debris. Results of the geophysical survey indicated that the landfill encompassed 5 acres with a larger northern pod containing the majority of landfill material and four smaller southern pods adjacent to the wetlands containing mostly near-surface debris.

The results of the 1996 SI [ABB Environmental Services, Inc. (ABB), 1996] at AOC 9 are summarized below.

Surface Water Contamination

During the 1996 SI (ABB, 1996) at AOC 9, surface water samples were collected from the Nashua River and the wetland area south of the debris landfill. Concentrations of some inorganics, including aluminum, iron, and lead were measured above ecological benchmark concentrations. The SI report suggested that detected inorganic concentrations in the river were generally representative of Nashua River water quality in the area. The SI report concluded that contaminant effects on surface water from AOC 9 debris were not likely significant.

Sediment Contamination

Relatively low concentrations of total petroleum hydrocarbons (TPH) and some inorganics were present in sediment samples collected from the wetland area south of the debris landfill. Relatively low concentrations of VOCs and semivolatile organic compounds (SVOC) were measured in sediment samples collected from the Nashua River. Concentrations of inorganics in Nashua River sediment samples were relatively consistent upstream and downstream of AOC 9 and likely represent typical Nashua River sediment quality in the area. The SI report concluded that contaminant effects on sediment from AOC 9 debris were likely typical of other contaminated reaches along the Nashua River.

Surface Soil Contamination

Organic compounds were not detected in surface soil samples collected at AOC 9. The inorganics copper, lead, and nickel were detected at a concentration above Devens background, but below USEPA Region III residential standards.

Subsurface Soil Contamination

During the 1996 SI soil samples were collected from four test pits excavated within the landfill limits. A total of eight soil samples were collected. Analytical results indicate the presence of polycyclic aromatic hydrocarbons (PAH) in soil, most likely attributed to the presence of ash and burnt wood debris. Total petroleum hydrocarbon levels were detected in all but one test pit located just outside the southern limit of mapped landfill materials. The 1996 SI determined a rough correlation existed between SVOC and TPH concentrations. The elevated concentrations of organic compounds detected in soil samples collected from the landfill test pits are likely derived from the ash and charred wood observed during sampling. The absence of volatile petroleum compounds in soil supports this contention.

Inorganic analytes including barium, calcium, chromium, copper, lead, nickel, potassium, silver, sodium and zinc, were detected above the calculated background concentrations for Fort Devens soils. The 1996 SI determined a rough correlation is evident between elevated concentrations of organic and inorganic analytes in test pits soils.

Groundwater Contamination

Two rounds of groundwater samples were collected from monitoring wells at the site during the SI. Chloroform was detected in AOC 9 groundwater. Chloroform was detected in one of ten samples collected during Round 1. The chloroform concentration was below Massachusetts drinking water standard. Several organics were detected in upgradient, downgradient, and cross-gradient wells. Eight of the 18 inorganics detected in unfiltered Round 1 samples exceeded their respective drinking water standard or guideline.

Inorganics were detected above background concentrations in nearly all groundwater samples collected from AOC 9 groundwater monitoring wells. The eight inorganics were aluminum, arsenic, chromium, cobalt, iron, lead, manganese, and nickel. Filtered samples collected during Round 2 showed reductions in concentrations of these inorganics, suggesting that the elevated concentrations detected in Round 1 were the result of suspended solids present in the samples. During Round 2, reported concentrations of chromium, lead, and nickel were below their respective drinking water standards or guidelines.

AOC 40

AOC 40 is located along the edge of Patton Road, in the southeastern portion of the Main Post. This area was used for the disposal of construction debris (masonry, asphalt, wire and metal), ash, stumps, and logs.

AOC 40 covers approximately 4 acres and was estimated to contain 110,000 cy of debris. Portions of the landfill area were situated in a wetland and were subsequently submerged under Cold Spring Brook Pond. The area was densely populated with trees and other vegetative cover. The northern edge of the landfill area dropped off abruptly to the wetland or to the pond with a difference in elevation ranging between 10 and 20 feet (ft). The area is also within a recharge zone for the Patton water supply well.

The results of the supplemental remedial investigation (RI) (ABB, 1993) at AOC 40 are summarized below.

Surface Water Contamination

Inorganic analytes were detected in surface water samples collected from Cold Spring Brook Pond. Surface water contamination did not pose a risk to ecological receptors at the debris disposal area, based on comparison to ecological benchmarks developed to be protective of aquatic organisms.

Sediment Contamination

Sediments in Cold Spring Brook Pond contained PAHs, pesticides, and inorganics. Arsenic and dichlorodiphenyldichloroethane (DDD) were detected in concentrations determined to pose a risk to ecological receptors.

Surface Soil Contamination

Samples collected from the landfill soil cover contained PAHs, pesticides, and inorganics. The relatively low concentrations of surface soil contaminants posed neither human health nor ecological risks.

Groundwater Contamination

Groundwater quality at AOC 40 was investigated by two rounds of sampling as part of the RI, and by two rounds of sampling as part of the supplemental RI. Contaminants detected in groundwater were primarily inorganics. The supplemental RI (ABB, 1993) concluded that AOC 40 was not the source of contamination.

SA 13

SA 13 was used between 1965 and 1990 for disposal of construction debris, stumps, and brush. Debris volume was estimated to be approximately 10,000 cy. The landfill was less than one acre in size and is located on the west side of Lake George Street near Hattonsville Road on the former Main Post. SA 13 is surrounded by large trees, but no trees were growing on the landfill itself. Tree stumps, limbs, and trunks were deposited on the surface of the landfill and down the steep lower slope. A wetland was located at the base of this slope.

The results of the Supplemental SI (ABB, 1994 and 1995) at SA 13 are summarized below.

Surface Water Contamination

Organic and inorganic chemicals were detected in surface water samples collected from the wet area at the toe of the debris area. Nitroglycerine was detected in one of four surface water samples, at a concentration above its drinking water standard. Inorganic chemicals in surface water, particularly mercury, presented potential risks to sensitive aquatic ecological receptors.

Sediment Contamination

Sediment at SA 13 contained PAHs, TPH, pesticides, and inorganics. Pesticides in sediment presented a potential risk to sensitive aquatic ecological receptors.

Surface Soil Contamination

Soil samples collected from stained areas directly over the debris area contained PAHs, TPH, pesticides, and inorganics. Surface soil samples collected from the debris area contained higher concentrations of contaminants than those collected down slope of the landfill.

Groundwater Contamination

Contaminants detected in groundwater at SA 13 were primarily inorganics. Elevated detections were attributed to turbidity in unfiltered samples, not to the landfill.

3.4 Initial Response

Details of the DCL feasibility studies and site investigations are discussed in Section 3 of the 2015 Devens Five-year Review Report (H&S, 2015). As noted above, SIs and RIs were completed at AOCs 9 and 40 and SA13 to verify the presence or absence of contamination and to further assess contaminant distribution. These investigations were used to define depth, extent, type of waste, composition of waste and site conditions to help identify remedial alternatives.

A ROD, issued in July 1999 [Harding Lawson Associates (HLA), 1999], presented the selected remedial actions for the seven debris disposal areas. The selected remedial alternative (Alternative 4c) required full excavation of AOC 9, AOC 40, SA 13, with on-site consolidation or off-site disposal options. In a separate evaluation after the ROD was issued, an evaluation of on-site versus off-site disposal options was conducted and disposal of the remedial debris in an on-site landfill to be built at the former golf course driving range on Patton Road was chosen (S&W, 2000a).

3.5 Basis for Taking Action

As summarized in Section 3.4, contaminants of concern included low levels of inorganic analytes in surface water and groundwater; PAH, TPH and inorganic analytes were detected in sediment samples from wet areas around AOC 9, AOC 40, and SA 13; and PAH, TPH, pesticides and inorganic analytes were detected in soil samples collected from above the debris areas at AOC 9, AOC 40, and SA 13.

The remedy component for AOC 9 was selected to assist the civilian redevelopment effort at Devens and remove the potential, future threat of contaminant release to area groundwater. Removal of landfill debris allowed for unimpeded expansion of the nearby wastewater treatment facility and eliminated the potential release of contaminants to groundwater.

The remedy component for AOC 40 eliminated the threat of potential, future risk to a nearby public groundwater supply well. Removal of landfill debris at AOC 40 allowed for unimpeded, expanded use of the water supply well and allowed for planned realignment of Patton Road.

The remedy component at SA 13 eliminated the threat of potential risk within an area of possible redevelopment. Removal of debris and wet area soil, followed by site restoration, addressed the potential ecological risks to sensitive aquatic receptors.

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4.0 REGULATORY ACTIONS

4.1 Record of Decision and Remedial Response Objectives

The remedial response objectives as defined by the 1999 ROD were:

- Prevent human exposure to groundwater contaminants released from Devens landfills that exceed acceptable risk thresholds;
- Protect human and ecological receptors from exposure to landfill soils having concentrations of contaminants exceeding acceptable risk thresholds;
- Prevent landfill contaminant releases to surface water that result in exceedance of the ambient water quality criteria (AWQC) or acceptable ecological risk-based thresholds;
- Reduce adverse effect from contaminated landfill media to the environment that would reduce the amount of land area available for natural resource use;
- Prevent exposure by ecological receptors to landfill-contaminated sediments exceeding acceptable risk-based thresholds and
- Support the civilian redevelopment effort at Devens.

4.2 Remedy Description

Key components of the selected remedy for the sites where consolidation of landfill debris was recommended are described below.

AOC 9, 11, and 40 and SA 13

- Mobilization/demobilization (Includes backhoes, bulldozers, and dump trucks mobilized/demobilized at AOC 9, AOC 11, AOC 40, and SA 13. Additional sediment removal equipment requiring mobilization at AOC 40 may include an excavator or a clamshell crane, watertight dump trucks, and water storage tanks);
- Site preparation (Includes clearing of trees, constructing temporary access roads, and installing silt fences and erosion control measures at AOC 9, AOC 11, AOC 40, and SA 13. At AOC 40, drum removal would be attempted. Construction of a lined basin for dewatering sediment, a lined drum storage area for staging drums, small decontamination pads, a stockpile area approximately 1 acre in size for storage of excavated materials, and a small parking area would be required);
- AOC 40 sediment removal with disposal either in the DCL or in an off-site landfill;
- AOC 40 drum removal with disposal either in the DCL or in an off-site landfill (It should be noted that this remedy was included in the ROD, but no drums were encountered during removal and consolidation construction operations.);
- Debris excavation, backfill, and re-grading;
- Wetland restoration at AOC 9, 11, and 40;
- Consolidation of excavated debris at the DCL, or transport to an off-site landfill;
- If required, cover system monitoring and maintenance at the DCL; and
- ICs and five-year site reviews at those sites where unrestricted future use is not achievable or economical.

43 Remedy Implementation

The decision to proceed with on-site consolidation was issued June 30, 2000, and a temporary (120 day) access agreement to begin construction was signed on September 15, 2000. The DCL was constructed at the former golf course driving range at the intersection of Patton Road and Queenstown Street in accordance with Massachusetts Department of Environmental Protection (MassDEP) Landfill Technical Guidance Manual (May 1997) and the Final Design Technical Specifications (EA Engineering, Science, and Technology, 1999). The remedial action closure report for the contributory sites and the landfill (Shaw, 2003a and b) presents the details of the Devens Consolidation Landfill construction activities.

Over the course of construction, approximately 591,804 tons of materials were placed at the landfill. Materials disposed of at the landfill included the debris excavated from the contributor sites. The approved landfill easement occupies 16.88 acres with approximately 8.0 acres used for debris disposal.

Key components of the selected remedy, Alternative 4C, which specified full excavation of the three contributor sites and consolidation of landfill debris on-site, are described below.

Remedial Action AOC 9

Excavation activities at AOC 9 began in January 2001 and were completed in June 2002. Debris was excavated from the 8.9-acre disposal area and transported to staging areas, which were used for material holding during sampling and waste characterization activities. Excavated debris was analyzed for waste disposal characteristics. Characterized debris material, consisting primarily of concrete, scrap steel, tires, soil, and miscellaneous demolition debris, was transported to the DCL for disposal. A total of 161,477 tons of debris materials from AOC 9 were disposed in the DCL.

During the excavation process, larger debris (i.e., wood, scrap steel, concrete debris and tires) was segregated from the stockpiled material and stored separately in an effort to recycle and reduce the volume of material to be disposed in the landfill. Segregated material was disposed of off-site at a licensed facility. Concrete debris was processed through a crushing plant for possible reuse as backfill in other areas, if analytical results indicated the material met the Preliminary Remediation Goals (PRG).

A total of 156,000 cy of debris was removed from AOC 9; this was 44,000 cy more than the original estimated volume of 112,000 cy. The 44,000 cy of additional debris was attributed to greater excavation depths due to extended debris limits beyond those originally estimated.

Cleanup goals for the disposal areas were established in the *Sampling and Analysis Plan* [Stone & Webster (S&W), 2000b] by using PRGs for residential soil. Following completion of excavation activities, restoration activities commenced. Restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002). The majority of the site was restored as upland areas. Upland areas were seeded with a restoration seed mixture that contained native grasses. The wetland area was restored by backfilling with clean fill and manufactured wetland soil. The restored wetland was stabilized with a custom wetland seed mix.

The property was transferred from Army ownership to MassDevelopment for redevelopment purposes in 2006. Institutional controls were recorded in the March 2006 deed (**Appendix B**) to prevent residential development of the property consistent with the Devens Reuse Plan.

Remedial Action AOC 40

Excavation activities at AOC 40 began in November 2000 and were completed in September 2002. Debris was excavated from the 3.9-acre disposal area and transported to the staging areas, which were used for material holding during sampling and waste characterization activities. Excavated debris was analyzed for waste disposal characteristics. Characterized debris material, consisting primarily of concrete, scrap steel,

stumps, soil and miscellaneous demolition debris, was transported to the DCL for disposal. A total of 166,799 tons of debris materials from AOC 40 were disposed in the DCL.

A total of 148,450 cy of debris was removed from AOC 40; this was 38,450 cy more than the original estimated volume of 110,000 cy. The 38,450 cy of additional debris was attributed to greater excavation depths than originally anticipated. It should be noted that although drum removal was included in the selected remedy, no drums were encountered during these remedial actions. Excavation limits to remediate the extent of debris encroached onto the existing roadway (Patton Road) adjacent to the disposal site. Road realignment was designed and constructed so that traffic would be detoured during the remedial activities.

Following completion of excavation activities, restoration activities began in September 2002 and were completed in October 2002. Due to the steep gradient, the side slopes adjacent to Patton Road were stabilized and protected by rip rap. Rip rap was placed from the base of the slope to approximately 10-foot above the waterline. Remainder of the slope was stabilized with six inches of loam and seeded with a native grass seed mixture. The restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002).

The property was transferred from Army ownership to MassDevelopment for redevelopment purposes in 2006. Institutional controls were recorded in the March 2006 deed (Appendix B) to prevent residential development of the property consistent with the Devens Reuse Plan.

Remedial Action SA 13

Debris was excavated from the 0.8-acre disposal area and transported to the staging area, which was used for material holding during sampling and waste characterization activities. Characterized debris material, consisting primarily of concrete, scrap steel, soil and miscellaneous demolition debris (i.e., glass and wood) along with some stumps and brush, was transported to the DCL for disposal. A total of 13,715 tons of debris materials from SA 13 were disposed in the DCL.

During the excavation process, larger debris (i.e., wood, scrap steel, concrete debris and tires) was segregated from the stockpiled material and stored separately to recycle and reduce the volume of material to be disposed in the landfill. Material that resulted from these efforts was disposed of off-site at a licensed facility. Although the concrete was segregated and processed, the end-product did not meet the requirements for reuse as backfill or road base material. Processed concrete was mixed with the debris stockpile and was disposed at the DCL.

A total of 13,900 cy of debris was removed from SA 13, 3,900 cy more than the original estimated volume of 10,000 cy. The 3,900 cy of excess debris was attributed to deeper excavation over extended debris limit than originally anticipated. The actual excavation depths ranged from 4 ft to 8 ft deeper than proposed excavation grades throughout the center of the excavation area.

Following completion of excavation activities, restoration activities commenced in October 2001. Minimal restoration operations took place at SA 13. Slopes were graded as necessary to provide a safe area and to promote drainage to feed the small wetland area to the south. Topsoil was placed over disturbed areas that were then seeded to stabilize and reestablish vegetation of the wetland and upland areas. Restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002).

The property was transferred from Army ownership to MassDevelopment for redevelopment purposes in 2006. Institutional controls were recorded in the March 2006 deed (Appendix B) to prevent residential development of the property consistent with the Devens Reuse Plan.

4.4 System Operations/Operation and Maintenance

There is no operation and maintenance activities performed at the three DCL contributor sites (AOC 9, AOC 40, and SA 13) addressed in this Addendum.

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5.0 PROGRESS SINCE LAST FIVE-YEAR REVIEW

The following is the complete Protectiveness Statement for the DCL from the 2010 Devens Five-Year Review Report (HGL, 2010):

“The remedy at the DCL and the DCL contribution sites AOCs 9, 40, and SA 13 are protective of human health and the environment, and exposure pathways that could result in unacceptable risk are being controlled.

Long-term protectiveness of the remedial action will be verified by groundwater monitoring at the DCL to assess potential leachate migration. Current monitoring data indicate that the remedy is functioning as required and will be verified by groundwater monitoring at the DCL to assess potential leachate migration.”

The 2010 Devens five-year review concluded that no Recommendations and Follow-Up Actions were needed at any of the DCL contributor sites subject to five-year reviews (HGL, 2010).

Per the ROD, the DCL contributor sites AOC 9, 40, and SA 13 were subject to ICs and five-year reviews if “unrestricted future use is not achievable or economical”. During the review period, ICs were in place at the DCL contributor sites AOC 9, AOC 40, and SA 13 to prevent the use of the sites for residential purposes.

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6.0 FIVE-YEAR REVIEW PROCESS

The review process for a five-year review includes a community notification and involvement, a historical document review, data review, site inspections, and interviews.

6.1 Administrative Components

The commencement of the 2015 five-year review for Former Fort Devens Army Installation was announced at the RAB meeting on January 15, 2015. The 2015 Devens five-year review was led by Robert Simeone, Army BRAC Environmental Coordinator and Carol Keating, USEPA Remedial Project Manager. Elizabeth Anderson of H&S Environmental, Inc. assisted in the review as the representative for the support agency.

The review consisted of the following components:

- Community Notification and Involvement
- Document Review;
- Data Review;
- Site Inspection; and
- Interviews.

6.2 Community Notification and Involvement

Activities to involve the community in the five-year review process were initiated with a meeting in January 2015 among the BRAC Cleanup Team including the Army, USEPA, and MassDEP. A notice was published in the local newspapers, the “Lowell Sun” on January 25, 2015, and in the Regional paper on January 30, 2015, stating that there was a five-year review and inviting the public to submit any comments to the BRAC Division of the U.S. Army Garrison, Fort Devens. The results of the review and the report will be made available at the Site information repository located at The Devens Repository, Department of the Army, Base Realignment and Closure Division, U.S. Army Garrison Fort Devens, 30 Quebec Street, Unit 100, Devens, MA 01434-4479.

6.3 Historical Document Review

Historical documents were reviewed with reference to the DCL contributor sites. These documents included the ROD (HLA, 1999) and previous five-year reviews.

6.4 Data Review

No sampling was conducted at any of the DCL contributor sites because long-term monitoring of the DCL contributor sites is not required under the selected remedial action.

6.5 Site Transfer

The three contributor site properties were transferred from the Army to MassDevelopment in March 2006 via Quit Claim deed (Parcels A2A, A4 and A8). A copy of the Quit Claim deed is included as Appendix B. Institutional Controls were incorporated into the deed to prevent residential development of the properties. This restriction is consistent with the 1994 Devens Reuse Plan that designates these areas for non-residential use only. There have been no changes in land-use at the individual contributor sites. Per the requirements of the 2006 transfer deed and the Devens Reuse Plan, these contributor sites are not being used, or under development, for residential purposes. Devens zoning only allows for commercial or industrial development (Innovation and Technology Business) in the area of SA 13. Devens zoning at AOC 9 indicates Environmental Business. Development at AOC 9 for residential purposes would not be allowed.

AOC 40 is zoned for Open Space/Recreational use and would not be developed for residential purposes. Figure 3 (Attachment A) indicates the zoning districts at Devens.

6.6 Site Inspection

The site inspection conducted on August 19, 2016 indicated that AOC 9 remains undeveloped. AOC 40 is along Patton Road. This location is a reconstructed wetland and is unsuitable for redevelopment. SA 13 is an area west of Lake George Street. The location is a shrub swamp and development of this area is not likely. Site Inspection reports, including photographs documenting site conditions, are included as **Attachment C**.

6.7 Interviews

As part of the five-year review process, interviews were conducted in accordance with the USEPA Five Year Review Guidance (2001) and summaries of each interview are provided in Appendix B of the 2015 Five-Year Review Report (H&S, 2015).

- Dan Groher, USACE
- Bob Simeone, USACE
- Pam Papineau, Ayer Board of Health
- Ron Ostrowski, MassDevelopment
- Deputy Fire Chief Adams, Devens Fire Department
- Ayer Police Chief Murray, Ayer Police Department
- Jason Overgaard, Sovereign Consulting (ATP Operator)
- Richard Doherty, People of Ayer Concerned about the Environment

In general, comments related to the site were positive and supportive. The Devens Deputy Fire Chief did express a concern related to insufficient communication regarding site activities. When asked, he did indicate that the Fire Department was routinely contacted regarding invasive work related to potential hazardous materials and contaminants to provide notice and preparation in the event of the required emergency response condition. His general comment was that overall project communication could be improved. Mr. Doherty of PACE indicated that the community appreciated receiving draft reports for review prior to final submittal.

7.0 TECHNICAL ASSESSMENT

This section details responses to the key questions from the 2001 USEPA Guidance on conducting five-year reviews as follows:

- Question A: Is the remedy functioning as intended by the decision documents?
- Question B: Are exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of the remedy still valid?
- Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

Question A: Is the remedy functioning as intended by the decision documents?

Yes. The remedy for the three DCL contributor sites (AOC 9, AOC 40, and SA 13) is functioning as intended by the decision document. The primary intent was to protect groundwater, which has been achieved by removing and consolidating the excavated debris at the DCL.

Remedial Action Performance: The remedial action at the three DCL contributor sites continues to function as designed. Debris and contaminated materials were excavated from each site and consolidated at the DCL and the sites were restored.

System Operations/O&M: There are no requirements for O&M at the three DCL contributor sites.

Opportunities for Optimization: Since there are no O&M or monitoring requirements at any of the DCL contributor sites, there are no opportunities for optimization of the remedy.

Early Indicators of Potential Issues: There is no indication of potential issues at any of the three DCL contributor sites.

Implementation of Institutional Controls and Other Measures: Transfer of AOC 9, AOC 40, and SA 13 to MassDevelopment occurred in March 2006 and ICs for these sites were included in the Findings of Suitability to Transfer and incorporated into the deeds. The ICs specify the restriction of residential development within the three sites. The IC site inspections and interviews confirmed there was no residential development at AOC 9, AOC 40, and SA 13.

Immediate threats that may have been present at the three DCL contributor sites were addressed through the remedial action that included excavation, consolidation of excavated debris at the DCL, and site restoration.

Question B: Are exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of the remedy still valid?

Appendix D includes a table of ARARs from the 1999 ROD (i.e., D-1) and a table with a preliminary list of ARARs that have changed since ROD issuance (i.e., D-2). Army will conduct a more thorough analysis of each of the standards and TBCs (i.e., exposure assumptions, toxicity data, cleanup levels and remedial action objectives) included in the 1999 ROD as part of the next (2020) Devens five year review to confirm that post-ROD changes to these standards and TBCs, if any, would/do not affect the protectiveness determination for the remedy(s) selected for the DCL and the DCL Contributor Sites.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No information has come to light that would call into question the short-term protectiveness of the remedy. In order for the remedy to be protective in the long-term, Army must conduct a more thorough analysis of each of the standards and TBCs (i.e., exposure assumptions, toxicity data, cleanup levels and remedial action objectives) included in the 1999 ROD as part of the next (2020) Devens five year review to confirm that post-ROD changes to these standards and TBCs, if any, would/do not affect the protectiveness of the remedy(s) selected for the DCL and the DCL Contributor Sites.

No natural disaster impacts occurred at the DCL contributor sites during this review period.

8.0 ISSUES

While no issues affecting short-term protectiveness of the remedy for three DCL Contributor Sites, AOC 9, AOC 40, and SA 13 were identified in this (2015) Devens Five-Year Review Addendum, the ARARs assessment is not yet complete. An analysis of each of the ARARs and TBCs (i.e., exposure assumptions, toxicity data, cleanup levels and remedial action objectives) included in the 1999 ROD must be conducted in the next (2020) Devens five-year review to ensure protectiveness in the long-term.

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9.0 RECOMMENDATIONS AND FOLLOW-UP ACTIONS

Although this (2015) Devens Five-Year Review Addendum did not identify issues affecting current protectiveness of the remedy for the DCL Contributor Sites, Army must complete its ARARs assessment in order to ensure protectiveness in the long-term. Specifically, Army has agreed to assess each of the ARARs and TBCs (i.e., exposure assumptions, toxicity data, cleanup levels and remedial action objectives) included in the 1999 ROD as part of the next (2020) Devens five year review to confirm that post-ROD changes to these standards and TBCs, if any, would/do not affect protectiveness for the remedy(s) selected for the DCL and the DCL Contributor Sites. In addition, Army may prepare an updated baseline risk assessment for regulatory review and concurrence to evaluate attainment of unlimited use/unrestricted exposure (UU/UE) cleanup goals and support removal of ICs prohibiting residential use of these properties.

Finally, in accordance with amended floodplain management and wetland protection regulations (44 C.F.R. 9, Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Protection of Wetlands)), Army will ensure protection of wastes left in place within a floodplain by monitoring, managing and repairing, if necessary, rip-rap and/or soil covers up to the 500- year flood elevation. The amended floodplain regulations (*see* Appendix D-2) will also be discussed and more thoroughly evaluated as part of the next (2020) Devens five-year review.

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10.0 PROTECTIVENESS STATEMENT

There are no LTM or O&M requirements in place for the DCL contributor sites, AOC 9, AOC 40, and SA13. Per requirements set forth in the 1999 ROD, 2006 transfer deed and the Devens Reuse Plan, annual site inspections of the DCL contributor sites confirmed that these areas are not currently used, or under consideration for being used, for residential purposes.

The remedy at the DCL contributor sites is Short-Term Protective. The remedy currently protects human health and the environment because institutional controls are enforced, and no exposures are occurring or imminent. However, for the remedy to be protective in the long-term, Army must complete its ARARs assessment in the next (2020) Devens five-year review in accordance with CERCLA, the NCP and EPA's five-year review guidance to ensure protectiveness. Army has agreed to build upon the preliminary work conducted as part of this five-year review Addendum and complete its ARARs assessment in the next (2020) Devens five-year review.

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11.0 NEXT REVIEW

The next five-year review for the DCL and its contributor sites, AOC 9, AOC 40, and SA 13 will be conducted in 2020 as part of the five-year review for the Former Fort Devens Army Installation BRAC Legacy Sites. ICs will remain in place until an updated human health risk assessment is prepared and submitted to EPA and MassDEP for concurrence/approval that the contributor sites are deemed suitable for UU/UE.

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ATTACHMENT A
FIGURES

- Figure 1 Devens Consolidation Landfill (DCL) Contributor Site Locations
- Figure 2 Devens Consolidation Landfill
- Figure 3 Devens Zoning Districts

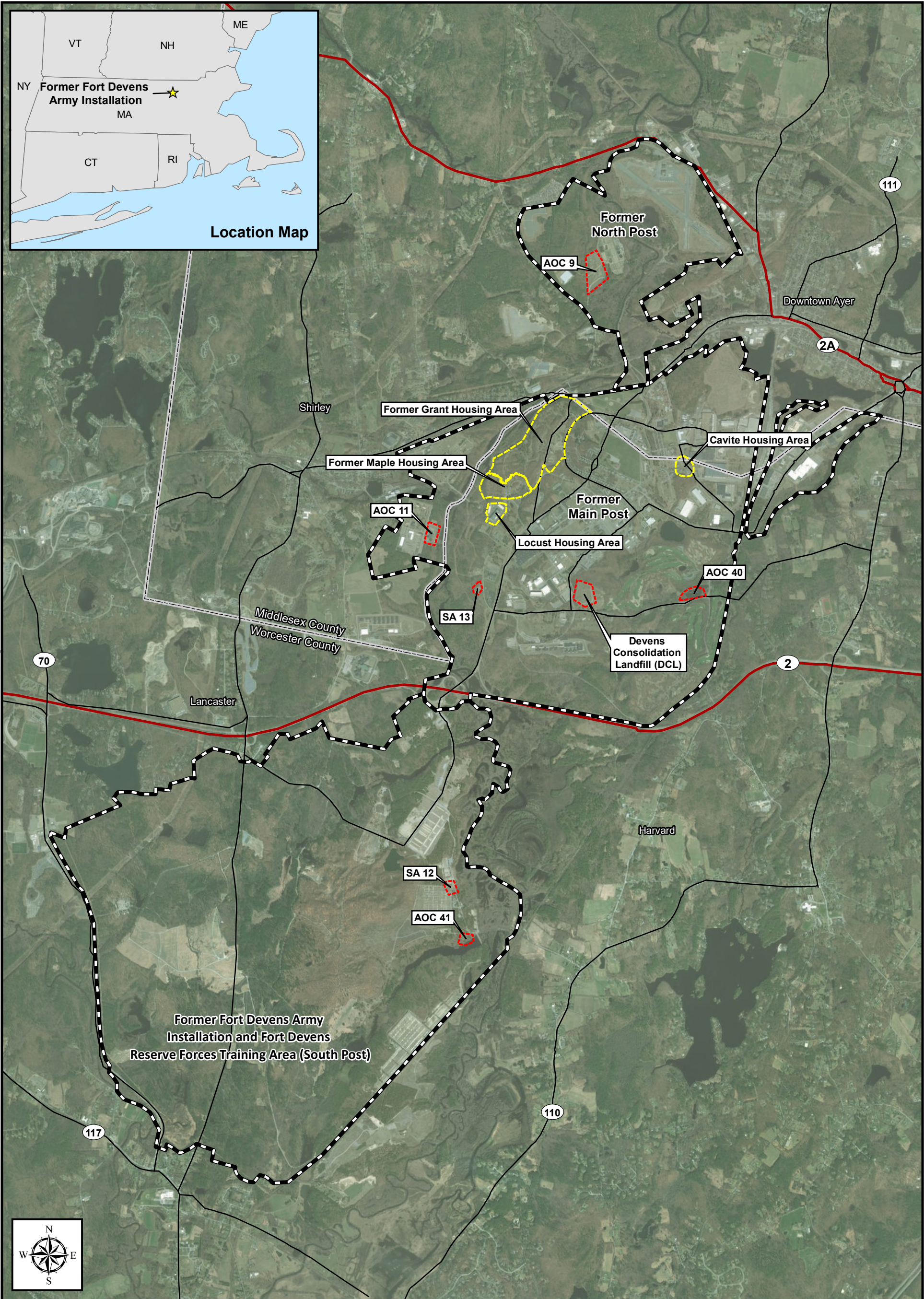


Figure 1 Devens Consolidation Landfill (DCL) Contributor Site Locations	Legend <div><div></div> Approximate AOC Area <div></div> Approximate Housing Area <div></div> Highway <div></div> Major Road <div></div> County Line <div></div> Former Fort Devens Boundary</div>	2015 Five-Year Review Addendum DCL Contributor Sites			
		Former Fort Devens Army Installation, Devens, Massachusetts			
		KOMAN Government Solutions, LLC 293 Boston Post Road West, Suite 100, Marlborough, MA 01752			
		<div>01,7503,500 Feet</div>	Date: 02/15/2018	Figure 1	

Figure 2
Devens Consolidation Landfill



Legend

- LTM Sample Well
- LTM Well - Gauge Only
- Gas Vent
- Monitoring Well - Destroyed
- LFM-03-07 Well/Vent Identification
- Topographic Contour (ft AMSL)

Notes:

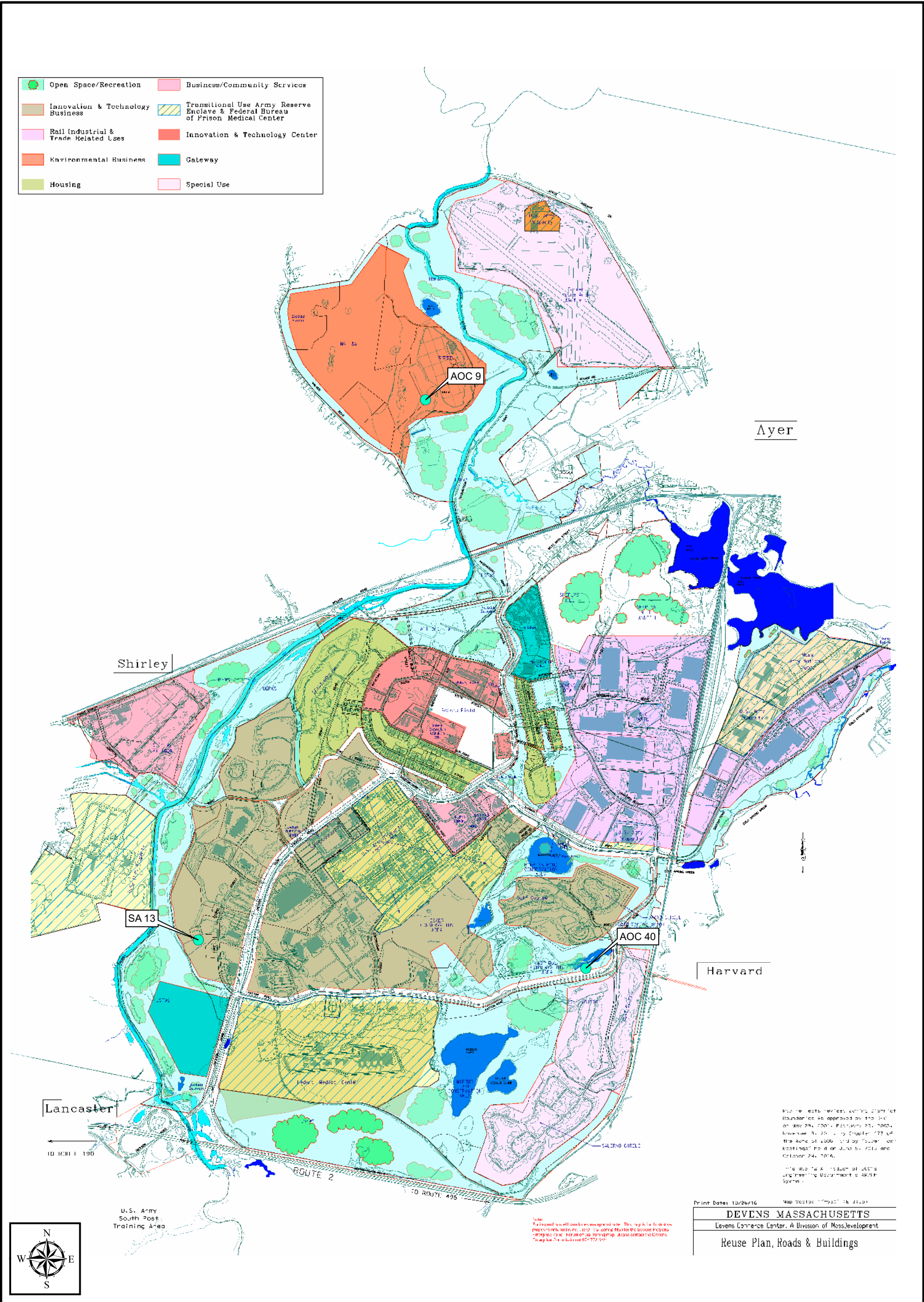
LFM-99-06A was replaced by LFM-99-06A-RP in September 2015.

Gas vent locations were approximated based upon the locations displayed in Figure 2 of USACE New England District's Devens Consolidation Landfill 2004 Annual Report.

ft AMSL = feet above mean sea level
LTM = long term monitoring

Aerial Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

2015 Five-Year Review Addendum Devens Consolidation Landfill			
Former Fort Devens Army Installation Devens, Massachusetts			
KOMAN Government Solutions, LLC 293 Boston Post Road West, Suite 100, Marlborough, MA 01752			
	Date: 02/15/2018	Figure 2	



This map is a revision of the 2011 Devens Zoning District Boundaries as approved by the Board of Selectmen on May 24, 2011. The map is a revision of the 2011 Devens Zoning District Boundaries as approved by the Board of Selectmen on May 24, 2011. The map is a revision of the 2011 Devens Zoning District Boundaries as approved by the Board of Selectmen on May 24, 2011.

Print Date: 12/26/16	Map Section: 11/20/16, 12/26/16
DEVENS MASSACHUSETTS	
Devens Commerce Center, A Division of MassDevelopment	
Reuse Plan, Roads & Buildings	

Figure 3
Devens Zoning Districts

Legend
● Area of Contamination (AOC)

Note:
Zoning and parcel boundaries are approximate. This map is for illustrative purposes only and is not the Official Zoning Map for the Devens Regional Enterprise Zone. For an official zoning map, please contact the Devens Enterprise Commission at 978.772.8831.

Source: Reuse Plan, Roads & Buildings - Devens Commerce Center, A Division of MassDevelopment Product of DCC's Engineering Department's AM/FM System 10/26/2016

2015 Five-Year Review Addendum
DCL Contributor Sites

Former Fort Devens Army Installation,
Devens, Massachusetts

KOMAN Government Solutions, LLC
293 Boston Post Road West, Suite 100, Marlborough, MA 01752

0 1,000 2,000
Feet

Date:
02/16/2018

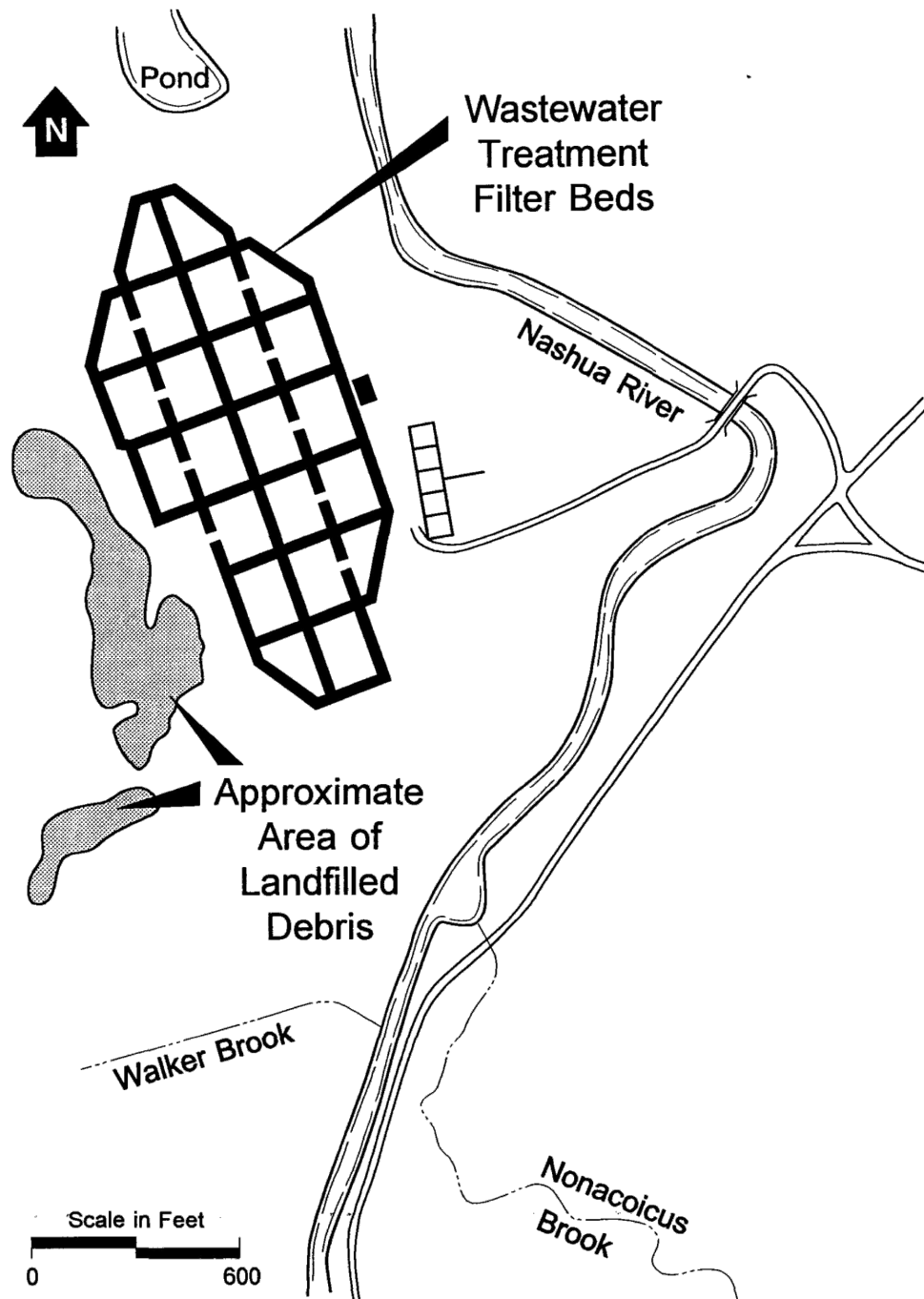
Figure
3




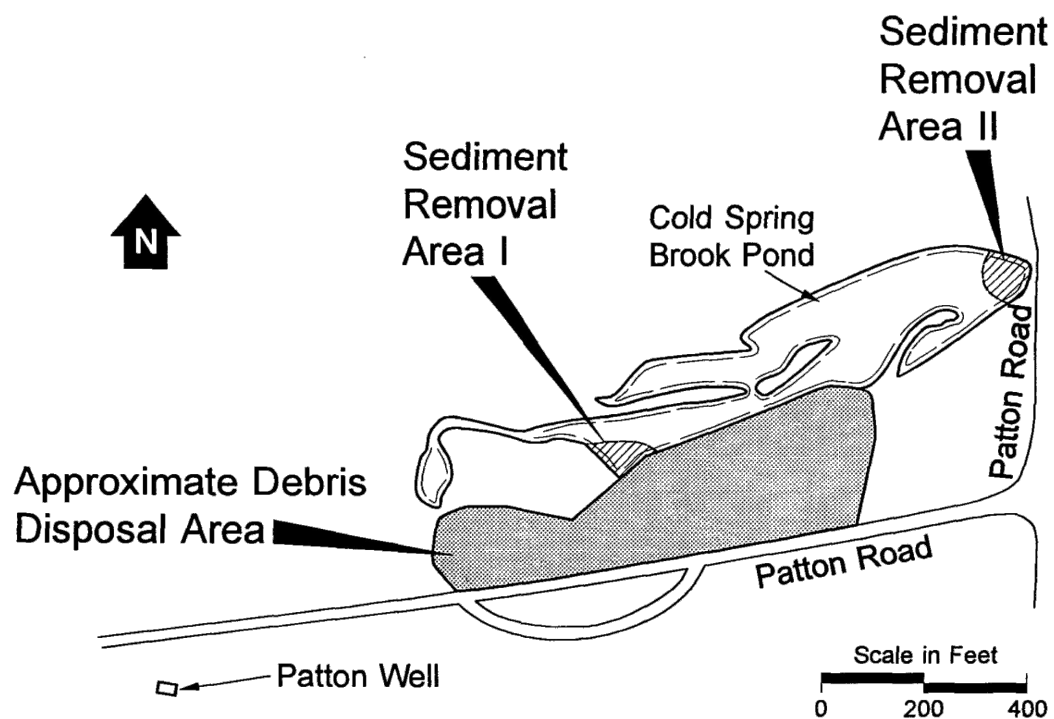



ATTACHMENT B

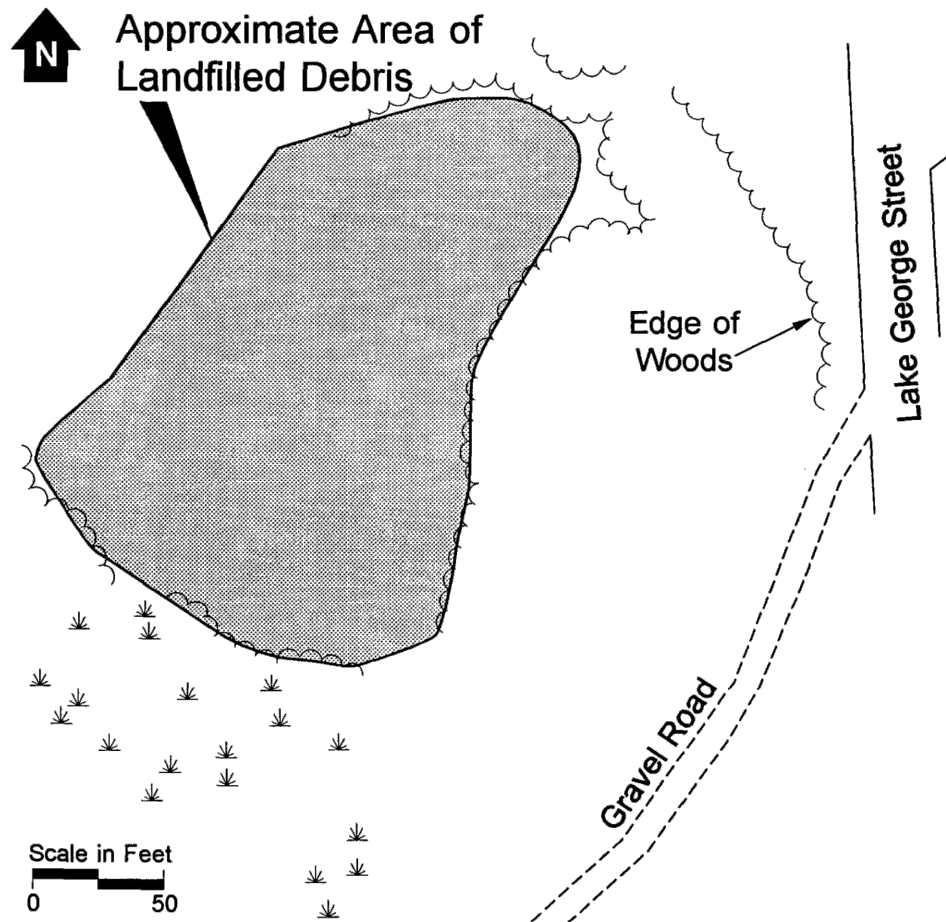
CADD Drawings of Original Site Maps




AOC 9 Site Map			
Former Fort Devens Army Installation and Sudbury Annex Devens, Massachusetts			
KOMAN Government Solutions, LLC 160 East Main Street, Suite 2F, Westborough, MA 01581			
Scale: As Noted	Date: 09/14/2016	Figure 2	



AOC 40 Site Map			
Former Fort Devens Army Installation and Sudbury Annex Devens, Massachusetts			
KOMAN Government Solutions, LLC 160 East Main Street, Suite 2F, Westborough, MA 01581			
Scale: As Noted	Date: 09/14/2016	Figure 3	



SA 13 Site Map			
Former Fort Devens Army Installation and Sudbury Annex Devens, Massachusetts			
KOMAN Government Solutions, LLC 160 East Main Street, Suite 2F, Westborough, MA 01581			
Scale: As Noted	Date: 09/14/2016	Figure 4	



ATTACHMENT C

**Site Inspections and Photographs Documenting Site Conditions at the
DCL Contributor Sites**

Inspection Checklist

This checklist has been developed from the USEPA guidance document Comprehensive Five Year Review Guidance dated June 2001 (OSWER No. 9355.7-03B-P) and from the 2015 Long-Term Monitoring and Maintenance Plan, Devens, Massachusetts. The Checklist was modified to site-specific conditions as recommended by the guidance document. The checklist will also be used to assist in compiling information for the five- year review.

I. Site Information		
Site Name: DCL Contributor Site AOC 9 Filter Bed Road, Ayer, MA Location: AOC 9	Name: Elizabeth Anderson Affiliation: KOMAN Government Solutions, LLC Date: August 19, 2016 Weather: Clear, 85oF	
Remedy Includes: No Further Action. Inspection to verify no change in site conditions since remedial action in 2000.		
Inspectors: Elizabeth Anderson		
Site Map Attached:		
II Documentation & Records		
Item	Check One	Comments
Any related notices filed with Devens Enterprise Commission?	Yes No	No. No activity. Location is within Oxbow Wildlife Refuge
Any related Department of Public Works permits found?	Yes No	No. None found
Any related zoning permits or variances found?	Yes No	No. None found.
Any related Conservation Commission findings, proposals or notices of intent found?	Yes No	No. None found.
III Physical On-site Inspection		
Item	Check One	Comments
Any evidence of new construction or excavation present in the area of the remedy?	Yes No	No. No evidence of construction activities observed.
Is there evidence of damage to the remedy?	Yes No	No. There is no damage,
Any groundwater extraction wells present?	Yes No	No. No groundwater extraction wells are present.
Is there sufficient access to the site for monitoring?	Yes No	Yes. Site is accessible.
Any signs of increased exposure potential?	Yes No	No. No exposure potential exists.

Name: Elizabeth Anderson

Signature: 

Photo documentation:



View of AOC 9



Additional view of area.

Inspection Checklist

This checklist has been developed from the USEPA guidance document Comprehensive Five Year Review Guidance dated June 2001 (OSWER No. 9355.7-03B-P) and from the 2015 Long-Term Monitoring and Maintenance Plan, Devens, Massachusetts. The Checklist was modified to site-specific conditions as recommended by the guidance document. The checklist will also be used to assist in compiling information for the five- year review.

I. Site Information		
Site Name: DCL Contributor Site AOC 40 Patton Road, Ayer, MA Location: AOC 40	Name: Elizabeth Anderson Affiliation: KOMAN Government Solutions, LLC Date: August 19, 2016 Weather: Clear, 85oF	
Remedy Includes: No Further Action. Inspection to verify no change in site conditions since remedial action in 2000.		
Inspectors: Elizabeth Anderson		
Site Map Attached:		
II Documentation & Records		
Item	Check One	Comments
Any related notices filed with Devens Enterprise Commission?	Yes No	No. No activity. Location is within Oxbow Wildlife Refuge
Any related Department of Public Works permits found?	Yes No	No. None found
Any related zoning permits or variances found?	Yes No	No. None found.
Any related Conservation Commission findings, proposals or notices of intent found?	Yes No	No. None found.
III Physical On-site Inspection		
Item	Check One	Comments
Any evidence of new construction or excavation present in the area of the remedy?	Yes No	No. No evidence of construction activities observed.
Is there evidence of damage to the remedy?	Yes No	No. There is no damage,
Any groundwater extraction wells present?	Yes No	No. No groundwater extraction wells are present.
Is there sufficient access to the site for monitoring?	Yes No	Yes. Site is accessible.
Any signs of increased exposure potential?	Yes No	No. No exposure potential exists.

Name: Elizabeth Anderson

Signature: 

Photo documentation:



AOC 40



Additional view



Additional view



Additional view



Inspection Checklist

This checklist has been developed from the USEPA guidance document Comprehensive Five Year Review Guidance dated June 2001 (OSWER No. 9355.7-03B-P) and from the 2015 Long-Term Monitoring and Maintenance Plan, Devens, Massachusetts. The Checklist was modified to site-specific conditions as recommended by the guidance document. The checklist will also be used to assist in compiling information for the five- year review.

I. Site Information		
Site Name: DCL Contributor Site SA 13 Lake George Street, Harvard, MA Location: SA 13	Name: Elizabeth Anderson Affiliation: KOMAN Government Solutions, LLC Date: August 19, 2016 Weather: Clear, 85oF	
Remedy Includes: No Further Action. Inspection to verify no change in site conditions since remedial action in 2000.		
Inspectors: Elizabeth Anderson		
Site Map Attached:		
II Documentation & Records		
Item	Check One	Comments
Any related notices filed with Devens Enterprise Commission?	Yes No	No. No activity. Location is within Oxbow Wildlife Refuge
Any related Department of Public Works permits found?	Yes No	No. None found
Any related zoning permits or variances found?	Yes No	No. None found.
Any related Conservation Commission findings, proposals or notices of intent found?	Yes No	No. None found.
III Physical On-site Inspection		
Item	Check One	Comments
Any evidence of new construction or excavation present in the area of the remedy?	Yes No	No. No evidence of construction activities observed.
Is there evidence of damage to the remedy?	Yes No	No. There is no damage,
Any groundwater extraction wells present?	Yes No	No. No groundwater extraction wells are present.
Is there sufficient access to the site for monitoring?	Yes No	Yes. Site is accessible.
Any signs of increased exposure potential?	Yes No	No. No exposure potential exists.

Name: Elizabeth Anderson

Signature: 

Photo documentation:



SA 13 former lay down area



SA 13



Additional view of SA13



Additional view of SA 13



Additional view of SA 13



APPENDIX A

Responses to Comments

**U.S. ARMY RESPONSES TO U.S. EPA COMMENTS ON THE
2015 FIVE YEAR REVIEW ADDENDUM
DEVENS CONSOLIDATED LANDFILL (DCL) CONTRIBUTOR SITES
FORMER FORT DEVENS ARMY INSTALLATION, DEVENS, MASSACHUSETTS
February 2017**

The following U.S. Army responses pertain to the U.S. Environmental Protection Agency (EPA) comments dated December 20, 2016 on the *2015 Five Year Addendum – Devens Consolidated Landfill Contributor Sites* for the Former Fort Devens, dated September 2016.

GENERAL COMMENTS

1. The purpose of a FYR is to evaluate the implementation and performance of a remedy in order to determine if the remedy is or will be protective of human health and the environment. When an IC is a component of a remedial action, the current and long-term effectiveness of that IC should be evaluated and relevant information about that IC should be included as part of the CERCLA-required FYR protectiveness determination. As you may recall, the 2005 Devens FYR evaluated the DCL and its contributor sites because ICs were presented in the 1999 ROD to restrict use of these sites for residential purposes. Although Army initially omitted these sites from the 2010 FYR (based on its position that they had been remediated to unrestricted use/unlimited exposure (UU/UE) levels), they were subsequently included in the 2010 FYR Report in response to EPA's July 29, 2010 comments and subsequent discussions related thereto. Since no formal changes have been made to 1999 ROD since release of the 2005 and 2010 FYRs, ICs are still a required component of the selected remedy and must be evaluated in the 2015 FYR. As requested in EPA's comments on the draft 2010 and 2015 reports, statements regarding the elimination of unacceptable risk, applicability of ICs and requirements for future FYRs have yet to be evaluated and approved by EPA and MassDEP and as such should be removed from the FYR Addendum for the DCL and its contributor sites.

Response: This Addendum is required to address the three DCL contributor sites (Area of Concern [AOC] 9, AOC 40, and Study Area [SA] 13) that have Institutional Controls (ICs) in place, as requested by EPA in their March 18, 2016 letter regarding "Former Fort Devens Installation-Dispute Resolution – (Issues 6-8), 2015 Devens Five Year Review (FYR) Report". The DCL itself was addressed in the 2015 Devens FYR Report and is not addressed in this Addendum. The document will be revised to include an evaluation of the current and long-term effectiveness of ICs for AOC 9, AOC 40, and SA 13, as described in the responses to the page-specific comments below. Statements regarding the elimination of unacceptable risk, applicability of ICs, and requirements for future FYRs will be revised, as indicated in the responses to page-specific comments below.

2. The draft 2015 FYR Addendum must include all areas and components addressed by the 1999 ROD (i.e. Devens Consolidation Landfill (DCL) and its contributor sites). Specifically, the draft report must be amended to more clearly identify and evaluate the specific remedial components selected for each area and provide sufficient evidence to support the required protectiveness determination. As discussed in the page-specific comments below, many of the specific details necessary to fully evaluate the current and future protectiveness of the selected remedies for the areas addressed in this 2015 FYR Report were not provided.

Response: See the response to Comment 1. The document will be revised to identify and evaluate the specific remedial components selected for the three DCL contributor areas (AOC 9, AOC 40, and SA 13) and provide sufficient evidence to support the required protectiveness determination, as described in the responses to the page-specific comments below.

3. Despite EPA's repeated requests to follow the requirements set forth in EPA's June 2001, "Comprehensive Five-Year Review Guidance," the draft Devens DCL 2015 FYR Report Addendum does not address/include each of the required elements. This is unacceptable and must be elevated for Army/EPA management resolution.

Response: The document will be revised to follow the *Comprehensive Five-Year Review Guidance* (EPA 540-R-01-007, June 2001).

4. Since this submittal was issued as an Addendum to the 2015 FYR, it should include a "FYR Summary Form" that includes all of the required information required per EPA's Guidance for conducting FYRs and EPA's March 18, 2016 correspondence summarizing the Additional Work required to resolve remaining 2015 FYR Report deficiencies (Issues 6-8). Specifically, the FYR Summary Form should include/address the following:
 - Site Identification- Former Fort Devens – must refer to the Site as identified in CERCLA;
 - Has the Site Achieved Construction Completion – Contrary to the Summary Form attached to Army's September 2015 FYR, the response to this question should be "No" since the question refers to the entire Former Fort Devens NPL Site;
 - Review Status –As discussed in EPA's September 9, 2015 comments, for Site with multiple OUs, the statutory requirement to perform five-year requirements is triggered by the "the initiation of the first remedial action that leaves hazardous substances, pollutants or contaminants on site at levels that do not allow for unlimited use and unrestricted exposure." For the former Fort Devens, the "Triggering action date" was the 1995 ROD for Shepley's Hill Landfill (SHL).
 - OUs without Issues/Recommendations – This section should identify all areas addressed in the 1999 ROD where remedial components have been successfully implemented, are preventing exposure to potential site-related risks, and are effectively providing short- and long-term protection of human health and the environment.
 - Issues and Recommendations - The "Recommendation" for the DCL and its contributor sites cannot be "No Further Action" since the 1999 ROD required, in addition to items, the implementation of ICs to prohibit residential use of these areas. This section should be amended to reflect the fact that while there are currently no issues that affect the protectiveness of the 1999 remedy, Army believes that ICs prohibiting residential use of specific parcels are no longer necessary because contaminant concentrations have been remediated to residential cleanup levels. Army is recommending, therefore, that an updated baseline risk assessment be prepared for those parcels which have been deemed suitable for UU/UE and upon EPA and MassDEP concurrence, the removal of ICs from the 1999 ROD will be memorialized in an Explanation of Significant Differences (ESD). Please be advised, however, that until these sites are deemed suitable for unrestricted use/unlimited exposure (based on EPA and MassDEP concurrence/approval of an updated human health risk assessment) and ICs/LUCs are subsequently removed from the 1999 remedy (via an Explanation of Significant Differences (ESD)) these sites cannot be removed from the five-year review process (see page-specific comment 16 below).

- Protectiveness Statement – The evaluation of IC protectiveness should be combined with the evaluation of all 1999 remedial components such that an overall protectiveness statement can be developed, using the answers to recommended Questions A, B, and C and the information developed during the FYR process.

Response: The requested FYR Summary Form will be included in the revised document for the DCL contributor sites.

PAGE-SPECIFIC COMMENTS

5. Page v, Table of Contents – As requested in EPA’s September 9, 2016 comments on the draft 2015 FYR Report, the document should be amended to follow the format in EPA’s June 2001, “Comprehensive Five-Year Review Guidance”. Specifically, the Table of Contents (and corresponding AOC-specific section) should be amended to include and/or adequately address each of the deficiencies identified in the proceeding comments.

Response: The document will be revised to follow the *Comprehensive Five-Year Review Guidance* (EPA 540-R-01-007, June 2001).

6. Page 1, Section 1.1– As discussed in EPA’s September 9, 2015 comments on the draft 2015 Five Year Review (FYR) Report, the FYR is being conducted in accordance with CERCLA, the NCP and EPA’s June 2001, “Comprehensive Five-Year Review Guidance” and not “because there was a disagreement between EPA and Army.” As you aware, ICs were incorporated into the quitclaim deed for parcels A2A (AOC 9), A8 (SA13), and A4 (AOC 40) to prevent residential development of the properties. Due to the LUCs placed in the quitclaim deed, the DCL and the three contributor sites became (and remain) subject to five-year reviews (AOC 11 did not include LUCs because it was remediated to unrestricted reuse). As previously discussed, because there have no formal changes to the 1999 remedy, the Army remains statutorily obligated to prepare and submit FYRs for these areas. Please revise the last sentence accordingly.

Response: The last two sentences of the first paragraph of Section 1.1 will be revised to read as follows:

“This addendum is required because hazardous substances, pollutants, or contaminants remain at three DCL contributor sites (AOC 9, AOC 40, and SA 13) above levels that allow for unlimited use and unrestricted exposure.”

7. Page 1, Section 1.1 – For reasons discussed in EPA’s September 9, 2016 comments (and comment 2 above), the current discussion needs to be expanded to specifically identify and discuss the DCL and seven “contributor sites” and include a more thorough explanation as to why some of the contributor sites were included in the 2010 FYR but eliminated from evaluation in the 2015 FYR. While the Army agreed to expand the discussion, the language proposed in its response to EPA’s comments, was not included in the draft FYR Addendum.

Response: Additional text will be added to identify and discuss the DCL and seven contributor sites, and explain why only the three (AOC 9, AOC 40, and SA 13) of the seven contributor sites are subject to five-year reviews. As discussed above, the DCL itself was addressed in the 2015 Devens FYR Report and is not addressed in this Addendum.

Additional text presenting the foregoing information will also be included in Section 1.2.1 of the revised document.

8. Page 9, Section 1.5.2 – Please provide figures for each AOC/SA that show the location of each confirmatory sample included in Table 3.4. It is extremely difficult, based on the information provided, to correlate sample IDs and locations from which the sample was collected.

Response: Figures depicting confirmatory sample locations for AOC 9, AOC 40, and SA 13 will be included in the revised document. Confirmatory samples were composite samples collected within a grid. These figures will be referenced in Sections 1.5.2.1, 1.5.2.2, and 1.5.2.3, respectively. There is no Table 3.4 in the document; it is assumed that the commenter intended to refer to Tables 3, 4, and 5.

9. Page 9, Section 1.5.2 – Please amend Table 3.4 to more clearly present confirmatory soil sample results for each sample location within the DCL and contributor sites (and ensure that these locations are consistent with those presented in the figures generated in response to comment 8).

Response: Tables 3, 4, and 5 will be revised, as necessary, to ensure that the confirmatory sample IDs match the sample IDs shown on the new figures referenced in the response to Comment 8.

10. Page 11, Section 1.5.3 – Please include a copy of the 2006 deed, transferring ownership of DCL contributor sites from Army to Mass Development (and any subsequent deeds) highlighting those specific portions of the deed(s) that incorporate ICs prohibiting residential development of these parcels.

Response: A copy of the deed(s) that transferred ownership of the DCL contributor sites from the Army to Mass Development (and any subsequent deeds) will be included as an appendix in the revised document. The portions of the deed(s) that present ICs prohibiting residential development will be highlighted. This new appendix will be referenced in Section 1.5.3.

11. Page 11, Section 1.5.4 - Please amend this discussion to include the DCL and all contributor sites addressed in the 1999 ROD where ICs were required.

Response: Section 1.5.4 addresses the three DCL contributor sites and inspection reports are provided in Appendix D. No changes are proposed. See the response to Comment 1.

12. Page 11, Section 1.6, Technical Assessment - The entire section must be deleted and replaced with text that adequately and appropriately responds to each of the three questions, for all areas and remedial components included in the 1999 ROD, as required by CERCLA, the NCP, and EPA's 2001 FYR Guidance (see comments 13–15 below).

Response: Agreed. This section will include the three questions for all areas and remedial components included in the 1999 ROD that pertain to the three DCL contributor sites. Since there are no O&M requirements for the DCL contributor sites the discussion will focus on implementation of the ICs. See the responses to Comments 13 through 15.

13. Page 11, Section 1.6, Question A - The current text does not adequately respond to the question identified in EPA's 2001 FYR Guidance (i.e. Is the remedy functioning as intended by the decision documents?). Specifically, the response should be amended to provide details regarding the O&M requirements and associated costs, opportunities for optimization, early indicators of potential remedy problems, and implementation of institutional controls and other measures. The response must address all components of the 1999 remedy (for the DCL and each of the contributor sites) and confirm that the selected remedy is functioning as intended in the 1999 decision document. The discussion should explain steps taking since the 2010 FYR to ensure that ICs remain effective and consistent with current and future land use plans.

Response: Section 1.6, Question A will be revised to address the details requested in the comment for the three DCL contributor sites. Since there are no O&M requirements for the DCL contributor sites the discussion will focus on implementation of the ICs.

14. Page 12, Section 1.6, Question B – The current text does not adequately respond to the question identified in EPA's 2001 FYR Guidance (i.e. Are exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of the remedy selection still valid?) Specifically, the response should be amended to discuss, where/if applicable, changes in exposure pathways, changes in land use, new contaminants and/or contaminant sources, remedy byproducts, changes in standards, newly promulgated standards and TBCs, changes in toxicity and other contaminant characteristics, expected progress towards meeting RAOs and risk recalculation/assessment (as applicable).

Assuming that there have been no changes since the “time of the remedy,” the response to Question B should be changed from “No” to “Yes.” While Army plans to submit an updated baseline risk assessment to support of its position that ICs are not needed at specific DCL contributor sites, this does not impact the protectiveness determination required for the DCL and its contributor sites as part of the Devens 2015 FYR. The Army may add language to the end of the discussion regarding its plans to submit an updated baseline risk assessment and ESD to remove ICs from specific areas addressed in the 1999 remedy but for purposes of the Devens 2015 FYR there have been no changes that support a “No” response.

Response: The response to Question B will be revised to provide a more detailed response for the three DCL contributor sites.

15. Page 12, Section 1.6, Question C - The current text does not adequately respond to the question identified in EPA's 2001 FYR Guidance (i.e. Has any other information come to light that could call into question the protectiveness of the remedy?) Specifically, the response should be amended to discuss, where/if applicable, ecological risks, natural disaster impacts, any other information that could call into question the protectiveness of the remedy.

Response: The response to Question C will be revised to “No” and the following text will replace the existing text.

“No other information has come to light that would call into question the protectiveness of the remedy was noted. No natural disaster impacts occurred at the DCL contributor sites during this review period.”

16. Page 12, Section 1.7, Issues – This section should be should identify issues, if any, pertaining to the existing remedy’s ability to ensure short and long term protectiveness of the remedy as documented in the 1999 ROD. Exhibit 4-3 located on page 4-11 of the FYR Guidance provides a recommended tabular format that should be used to evaluate and identify potential FYR-related issues. While the section may mention Army concerns regarding current land use restrictions and the continued inclusion of the DCL and its contributor sites in the FYR process, the current text is inappropriate for this discussion and should be deleted.

Response: The second and third sentences will be deleted. Section 1.7 will be revised to indicate that no issues have been identified that could impact the short or long-term protectiveness of the remedy for the three DCL contributor sites as documented in the 1999 Record of Decision (ROD). Since no issues were identified, Exhibit 4-2 of the FYR Guidance will not be utilized.

17. Page 12, Section 1.8, Recommendations – This discussion should be amended to identify/discuss “Recommendations and Follow-Up Actions” necessary to address each issue identified in the “Issues” section. As stated in EPA comments on the 2010 and 2015 FYRs, Recommendation should not include activities pertaining to ongoing actions such as routine operations and maintenance activities or proposed changes to the LTM program. While the section may mention Army plans to submit an updated baseline risk assessment and ESD, the current text is inappropriate and should be deleted. In addition, this section should include a table, as shown on page 4-13 of EPA’s 2001 FYR Guidance, that identifies each of the recommendations/follow-up actions and present milestone dates for commencement, review and completion of each action.

Response: Section 1.8 will be revised to indicate that no “Recommendations and Follow-Up Actions” are required for the three DCL contributor sites that are subject to five-year review but that the Army may submit an updated risk assessment to evaluate whether ICs are still needed at the three contributor sites. Since no “Recommendations and Follow-Up Actions” were identified, Exhibit 4-4 of the FYR Guidance will not be utilized.

18. Page 12, Section 1.9, Protectiveness Statement - As requested in EPA comments on the 2010 and 2015 draft FYR Reports, this section must be amended to address the DCL and all of its contributor sites and provide sufficient details to effectively evaluate and confirm the continued protectiveness of the remedy required per the 1999 ROD. The discussion must be expanded to evaluate each component of the selected remedy, identify ROD-specific contaminants of concern and describe how risks, current and/or potential, are being addressed by the selected remedy (i.e., ICs, LUCs, LTM, FYRs, etc.).

Response: Section 1.9 will be revised to evaluate each component of the selected remedy, identify any ROD-specific contaminants of concern and describe how risks, current and/or potential, are being addressed by the selected remedy (i.e., ICs, LUCs, LTM, FYRs, etc.) for the three DCL contributor sites.

19. Page 13, Section 1.11, Next Five Year Review – The text should be revised to reflect that the next FYR for the DCL and its contributor sites will be conducted in 2020. As previously discussed, while EPA acknowledges Army’s desire to remove the existing ICs from several DCL contributor sites, until these sites are deemed suitable for unrestricted use/unlimited exposure (based on EPA and MassDEP concurrence/approval of updated human health and

ecological risk assessments) and existing ICs/LUCs have been formally removed (via an ESD to the 1999 ROD), Army is required to comply with FYR requirements set forth in CERCLA, the NCP and EPA's June 2001, "Comprehensive Five-Year Review Guidance."

Response: Section 1.11 will be revised to indicate that the next FYR for the three DCL contributor sites is scheduled for 2020.

20. Tables – Please add the following tables to the "List of Tables" on page vii and include in the "Tables" section of the FYR Addendum. The table must include applicable information for all components of the 1999 remedy for the DCL and all of its contributor sites.

- "Annual System Operations/O&M Costs"
- "Quarterly Comparison of Groundwater Concentrations"
- "Issues"
- "Recommendations and Follow-Up Actions"

Response: Since there are no requirements for annual system operations/O&M and groundwater monitoring requirements or any identified "Issues", or "Recommendations and Follow-Up Actions" for the three DCL contributor sites, the requested tables are not required.

21. Figures - Please amend the current Figure 1 (or create a new figure) that shows the specific parcels addressed in the 1999 ROD and a clear demarcation of the restricted areas within each. In addition, please include a figure for each AOC/SA, showing the location of each confirmatory sample referenced in Table 3.4, ensuring that it clearly demarcates the "7 of 74" soil sample locations that exceeded applicable residential (i.e. UU/UE) cleanup standards (discussed on page 12, 1st paragraph).

Response: Figure 1 will be revised to show the location of the DCL and seven contributor sites. The parcels addressed in the 1999 ROD for the three DCL contributor sites will be shown on revised Figures 2, 3, and 4. There is no Table 3.4 in the document. It is assumed that the commenter intended to refer to Tables 3, 4, and 5 not Table 3.4.

22. Attachments – Please add the following to the "List of Appendices" on page ix and include them as separate appendices at the end of the FYR Addendum:

- "List of Documents Reviewed" – The list of "References" in Section 1.12 should be amended to include all documents reviewed for the 2015 FYR (including those added to the IC tracking system or other applicable database that collects information about ICs since issuance of the 2010 Devens FYR), as/if applicable, and presented as a separate attachment to the document.
- "Applicable or Relevant and Appropriate Requirements (ARARs)" – A table identifying and updating, if necessary, the ARARs evaluated as part of the remedy selection process should be included in the FYR Addendum;
- "IC Instruments" – A copy(ies) of recently issued deeds/leases (obtained via a title search if warranted) that includes the required use restriction language and legal descriptions of the restricted parcel(s) should be included in the FYR Addendum. The information is required to ensure that the ROD-required ICs have been implemented and are operating as envisioned.

Response: The List of Appendices will be revised to include the requested appendices.

23. Appendix A – The “Draft RA Closure Report” is not required in CERCLA FYRs and should be deleted.

Response: The Draft Remedial Action Closure Report will be removed from the document.

**U.S. ARMY RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY
COMMENTS ON THE
DRAFT FINAL 2015 FIVE YEAR REVIEW REPORT ADDENDUM
DEVENS CONSOLIDATED LANDFILL CONTRIBUTOR SITES AOC 9, 40 AND SA 13
FORMER FORT DEVENS ARMY INSTALLATION, DEVENS, MASSACHUSETTS
FEBRUARY 2018**

The following U.S. Army responses pertain to the U.S. Environmental Protection Agency (EPA) comments, dated 02 February 2018, on the *Draft Final 2015 Five Year Addendum Devens Consolidated Landfill (DCL) Contributor Sites AOC 9, 40 and SA 13* at the Former Fort Devens Army Installation, Devens, Massachusetts, dated October 2017.

Comment 1 – Page vi – Omitted the entire “List of Tables” page. Table 1 is embedded in Section 2.0 and doesn’t need to be referenced here and the confirmation soil sample results (previously provided in Tables 2-4) are unnecessary for determining whether the selected remedy (i.e. excavation of materials from individual remedial areas and consolidation in a new, secure onsite landfill) is still protective of human health and the environment.

Response: The List of Tables and Tables 2, 3, and 4 were removed.

Comment 2 – Page vii, LIST OF ATTACHMENTS, Attachment A Figures – For reasons previously stated, confirmation soil sample locations and sample data should not be included in the DCL FYR Addendum (i.e. they are not needed to determine whether the selected remedy(ies) is protective of human health and the environment).

Response: Figures 2, 3, and 4 were removed.

Comment 3 – Page vii, LIST OF ATTACHMENTS, Attachment A, Figure 1 – Although the focus of the DCL FYR Addendum is on the DCL contributor sites (because they were omitted from the DCLOU discussion in the September 2015 FYR Report), the DCL is part of the selected remedy and, at a minimum, should be identified/referenced in this document (and the reader referred to the relevant section of the September 2015 FYR Report for specific information related thereto).

Response: The DCL is identified on Figure 1. Figure 2 (Devens Consolidation Landfill site map) has been added to the addendum.

The second sentence of Section 3.1 was revised as follows:

“The DCL is discussed in detail in Section 3 the 2015 Devens five-year review report (H&S, 2015) (Attachment A, Figure 2).”

The first sentence of Section 3.4 was revised as follows:

“Details of the DCL feasibility studies and site investigations are discussed in Section 3 of the 2015 Devens five-year review report (H&S, 2015).”

Comment 4 – Page vii, LIST OF ATTACHMENTS, Attachment F – Assuming that inspection records and photos for the DCL were submitted with the 2015 FYR Report, this only pertains to the DCL contributor sites.

Response: The attachment only includes site inspection records and photos of the DCL contributor sites. The Attachment has been renamed “Site Inspections & Photos Documenting Site Conditions at the DCL Contributor Sites”.

Comment 5 Page vii, LIST OF ATTACHMENTS, Attachment H – Consistent with EPA’s guidance for conducting FYRs, these be provided in an Appendix (see below).

Response: The attachment was moved to Appendix A.

Comment 6 – Page vii, LIST OF APPENDICES, Appendix A – Only those comments relevant to the DCL (September 2015 FYR) and/or the DCL contributor sites (as applicable) need be included).

Response: Appendix A only includes comments relevant to the DCL (September 2015 FYR) and/or the DCL contributor sites (as applicable).

Comment 7 – Page xiv, FIVE-YEAR REVIEW SUMMARY FORM, SITE STATUS – As stated in EPA 12/20/17 comment #4, the response to this question is “No” because it refers to the entire Fort Devens Superfund Site; sitewide construction is not yet complete

Response: The response to “Has the site achieved construction completion” was revised to “no”.

Comment 8 – Page xiv – Revise text “Recommendations and Follow-up Actions: This five-year review revealed no issues that affect the protectiveness of the 1999 remedy for the three DCL contributor sites AOC9, AOC 40, and SA 13. However, Army may prepare an updated baseline risk assessment for regulatory review and concurrence to evaluate attainment of UU/UE cleanup goals and support removal of ICs prohibiting residential use of these properties.”

Response: The text was revised per the comment.

Comment 9 – Page 1 – Revise text “KOMAN Government Solutions, LLC, has prepared this Addendum to the 2015 Five-Year Review Report, for Former Fort Devens Army Installation, Base Realignment and Closure (BRAC) Legacy Sites, Devens, Massachusetts (H&S, 2015) to address three Devens Consolidation Landfill (DCL) contributor sites that have Institutional Controls (IC) in place: Area of Contamination (AOC) 9, AOC 40, and Study Area (SA) 13. This Addendum is required because hazardous substances, pollutants or contaminants remain at these sites above levels that allow for unlimited use and unrestricted exposure (UU/UE) but were inadvertently excluded from the DCL evaluation in the 2015 Devens five-year review report (H&S, 2015).”

Response: The text was revised per the comment.

Comment 10 – Page 6, Section 3.2– Open Space/Recreational Areas is inconsistently capitalized through the document; please amend as necessary.

Response: Throughout the document “open space/recreational areas” was revised to be consistently formatted to “Open Space/Recreational areas”.

Comment 11 – Page 9, Section 3.4, 2nd paragraph– Please explain reference to “best value” since this is not a term used to describe a remedy selected in accordance with CERCLA and the NCP.

Response: The term “best value” was in reference to an option of the remedial alternative that was selected. The text was revised to read as follows:

“A ROD, issued in July 1999 [Harding Lawson Associates (HLA), 1999], presented the selected remedial actions for the seven debris disposal areas. The selected remedial alternative (Alternative 4c) required full excavation of AOC 9, AOC 40, SA 13, with on-site consolidation or off-site disposal options. After evaluation of on-site versus off-site disposal options; it was determined that disposal of the remedial debris in an on-site landfill to be built at the former golf course driving range on Patton Road was the “best value” option (S&W, 2000a).”

Comment 12 – Page 12, Section 4.0 – Change the title of Section 4.0 to Regulatory Actions, Section 4.1 to Record of Decision & Remedial Action Objectives (RAOs) and add a Section 4.2 Remedy Description header.

Response: The title of Section 4.0 was changed to Regulatory Actions, Section 4.1 was changed to Record of Decision and Remedial Response Objectives, and a Section 4.2 Remedy Description header was added.

Comment 13 – Page 12, Section 4.1 – This section should be expanded to include a discussion of the ROD and RAOs specific to the contributor sites.

Response: The term “remedial response objectives” was used in the ROD; the term “remedial action objectives” was not used in the ROD. The remedial response objectives were reproduced directly from the ROD and address all the sites covered by the ROD (i.e., SA 6, SA 12, SA 13, AOC 9, AOC 11, AOC 40, and AOC 41). There were not additional remedial response objectives or remedial action objectives for individual sites developed in the ROD. No change to the Addendum text is needed.

Comment 14 – Page 12, Section 4.2, 1st bullet – Please elaborate on the specific tasks/activities associated with “mobilization/demobilization” for each site.

Response: The text was revised to read as follows:

- *“Mobilization/demobilization (Includes backhoes, bulldozers, and dump trucks mobilized/demobilized at AOC 9, AOC 11, AOC 40, and SA 13. Additional sediment removal equipment requiring mobilization at AOC 40 may include an excavator or a clamshell crane, watertight dump trucks, and water storage tanks);”*

Comment 15 – Page 12, Section 4.2, 2nd bullet – Please elaborate on the specific tasks/activities associated with “site preparation” for each site.

Response: The text was revised as follows:

- *“Site preparation (Includes clearing of trees, constructing temporary access roads, and installing silt fences and erosion control measures at AOC 9, AOC 11, AOC 40, and SA 13. At AOC 40, drum removal would be attempted. Construction of a lined basin for dewatering sediment, a lined drum storage area for staging drums, small decontamination pads, a stockpile area approximately 1 acre in size for storage of excavated materials, and a small parking area would be required);”*

Comment 16 – Page 17, Section 4.2, Remedial Action AOC 9, 4th paragraph – Please add S-1 to list of acronyms (with clear description of relevance as a residential cleanup goal).

Response: The text was clarified to read as follows:

“Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan [Stone & Webster (S&W), 2000b] by using PRGs for residential soil and/or Massachusetts Contingency Plan (MCP) S-1 soil standards, whichever was more stringent. Following verification that confirmatory sampling results met the PRGs/MCP S-1 values and the excavation limits had been reached, restoration activities commenced. Restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002).”

Comment 17 – Page 23, Section 6.4 – As recommended in EPA’s 2016 “Five-Year Review Recommended Template” (OLEM -9200.0-89), the discussion of historic, confirmation soil sampling results has been removed since it is irrelevant to the technical assessment evaluation in the proceeding section. Specifically, it recommends that only those data collected since the last

FYR, necessary to answer the three technical assessment question, be included. It also states that “all of the data collected and statistical analyses of these data should not be included, except where additional historical data may be needed to evaluate trends.

Response: All but the first sentence of Section 6.4 was deleted per the comment. The first sentence of Section 6.4 was revised as follows:

“No sampling was conducted at any of the DCL contributor sites since the last five-year review period, because long-term monitoring of the DCL contributor sites is not required under the selected remedial action.”

Comment 18 – Page 28, Section 7.0, Question B, Changes in Standards and To Be Considered – Please identify the specific standards “updated since the signing of the ROD in 1999” and explain why these changes would/do not affect the protectiveness determination.

Response: The text related to DCL construction was inadvertently included.

The second paragraph of Question B was revised as follows:

“Changes in Standards and To Be Considered – As the remedial work has been completed, the ARARs for soil contamination cited in the ROD (Appendix D) have been met. There have been no changes to these ARARs and no new standards or TBCs affecting the protectiveness of the remedy.

Excavation activities at DCL contributor sites AOCs 9, 40, and SA 13 were completed in 2003. Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan (S&W, 2000b) by using PRGs for residential soil and/or MCP S-1 soil standards, whichever was more stringent. PRGs were attained and verified through confirmation sampling. The remedial response objectives for soil specified in the ROD have been achieved. Contaminated soils were removed and placed in the DCL; therefore, changes to soil TBCs do not affect the protectiveness of the implemented remedy.”

Comment 19 – Page 33, Section 9.0, Recommendations and Follow-Up Actions – Revise the text as follows: “There are no recommendations pertaining to the protectiveness of the remedy as specified by the ROD. However, Army may prepare an updated baseline risk assessment for regulatory review and concurrence to evaluate attainment of UU/UE cleanup goals and support removal of ICs prohibiting residential use of these properties.”

Response: The text was revised per the comment.

Comment 20 – Page 37, Section 11.0, Next Review – Revise the last sentence as follows: “ICs will remain in place until an updated human health risk assessment is prepared and submitted to EPA and MassDEP for concurrence/approval that the contributor sites are deemed suitable for UU/UE.”

Response: The text was revised per the comment.

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DRAFT FINAL 2015 FIVE YEAR REVIEW REPORT ADDENDUM
DEVENS CONSOLIDATED LANDFILL CONTRIBUTOR SITES AOC 9, 40 AND SA 13
FORMER FORT DEVENS ARMY INSTALLATION, DEVENS, MASSACHUSETTS
FEBRUARY 2018**

The following U.S. Army responses pertain to the U.S. Environmental Protection Agency (EPA) comments concerning the ARARs Table B.1 (Comments 21- 30), dated 02 February 2018, on the *Draft Final 2015 Five Year Addendum Devens Consolidated Landfill (DCL) Contributor Sites AOC 9, 40 and SA 13* at the Former Fort Devens Army Installation, Devens, Massachusetts, dated October 2017.

Comment 21 – Table B.1 Requirement Column, 3rd Row – The discussion of Clean Water Act (CWA) Section 404 doesn't address all requirements of the 401(b) guidelines. Please review and amend, as necessary.

Response: The Army and EPA established the list and discussion of ARARs, as well as the actions to be taken to attain the ARAR requirements, at the time of the ROD. ARARs are normally frozen at the time of ROD signature unless a "new or modified requirement calls into question the protectiveness of the selected remedy." (USEPA, Comprehensive Five-Year Review Guidance, 2001). The ARARs were reviewed and there have been no changes in the ARARs that affect the protectiveness of the remedy. Therefore, no changes to the ARAR tables from the ROD are warranted for the Five-Year Review Report Addendum.

Comment 22 – Table B.1 Regulatory Authority Column, 7th Row – Please explain why MassDEP water quality standards are not listed as applicable. Typically they are applied to all discharges into a State water body.

Response: See response to Comment 21.

Comment 23 – Table B.2 Action to be Taken To Attain Requirement Column, 2nd Row – Please explain why the average concentration is compared to the MCL at AOC 40 for purposes of determining attainment with this ARAR. Typically, the maximum concentration detected is used to determine compliance with drinking water standards.

Response: See response to Comment 21.

Comment 24– Table B.2 Regulatory Authority Column Title – Please explain why MassDEP water quality standards are not listed as applicable. Typically they are applied to all discharges into a State water body.

Response: See response to Comment 21.

Comment 25– Table B.2 Status Column, 1st row – Please explain why the MassDEP groundwater standards are not applicable to discharges groundwater.

Response: See response to Comment 21.

Comment 26– Table B.2 Action to be Taken to Attain Requirement Column, 1st row – Please explain why the average concentration is compared to the MMCL/MCL at AOC 40 for purposes of determining attainment with this ARAR. Typically, the maximum concentration detected is used to determine compliance with drinking water standards.

Response: See response to Comment 21.

Comment 27 – Table B.3 Status Column, 1st row – Please note that where construction (i.e. disturbance) of an area is greater than one acre, the federal construction general storm water permit would be applicable.

Response: See response to Comment 21.

Comment 28 – Table B.3 Requirement Column, 1st row – Please explain why NPDES requirements are not identified as "applicable".

Response: See response to Comment 21.

Comment 29 – Table B.3 Requirement Column Title row – Please explain why MassDEP solid waste management regulations are not identified as "applicable".

Response: See response to Comment 21.

Comment 30 – Table B.3 Regulatory Authority Column, 6th Row – Please explain why State Water Quality Certification Requirements are not identified as "applicable". While the certification process would be applicable because it is procedural, the certification requires a substantive requirement that water quality standards are being met for all discharges.

Response: See response to Comment 21.

**U.S. ARMY RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY
COMMENTS ON THE U.S. ARMY RESPONSES TO THE
USEPA COMMENTS ON THE DRAFT FINAL 2015 FIVE YEAR REVIEW REPORT
ADDENDUM
DEVENS CONSOLIDATED LANDFILL CONTRIBUTOR SITES AOC 9, 40 AND SA 13
FORMER FORT DEVENS ARMY INSTALLATION, DEVENS, MASSACHUSETTS
August 2018**

The following U.S. Army responses pertain to the U.S. Environmental Protection Agency (USEPA) comments, dated 02 May and 13 June 2018 on the U.S. Army responses to USEPA comments dated 02 February and 23 May 2018, on the *Draft Final 2015 Five Year Addendum Devens Consolidated Landfill (DCL) Contributor Sites AOC 9, 40 and SA 13* at the Former Fort Devens Army Installation, Devens, Massachusetts, dated October 2017. Only the comments that required responses are included.

Comment 11 – Page 9, Section 3.4, 2nd paragraph– Please explain reference to “best value” since this is not a term used to describe a remedy selected in accordance with CERCLA and the NCP.

Response: The term “best value” was in reference to an option of the remedial alternative that was selected. The text was revised to read as follows:

“A ROD, issued in July 1999 [Harding Lawson Associates (HLA), 1999], presented the selected remedial actions for the seven debris disposal areas. The selected remedial alternative (Alternative 4c) required full excavation of AOC 9, AOC 40, SA 13, with on-site consolidation or off-site disposal options. After evaluation of on-site versus off-site disposal options; it was determined that disposal of the remedial debris in an on-site landfill to be built at the former golf course driving range on Patton Road was the “best value” option (S&W, 2000a).”

Subsequent Comment - The proposed text is a rearrangement of the original text and as such, remains inadequate in explaining the term “best value.” This is not a phrase used to describe a remedy selected in accordance with CERCLA and the NCP and must be defined if it is to be used in FYR Addendum.

Subsequent Response: The term “best value” was not used to describe the remedy selected or how one remedy was selected. The term “best value” was used during evaluation of the disposal options, which was conducted separately from the remedy selection process and after the ROD was issued. The term “best value” was deleted. The text was revised to read as follows:

“A ROD, issued in July 1999 [Harding Lawson Associates (HLA), 1999], presented the selected remedial actions for the seven debris disposal areas. The selected remedial alternative (Alternative 4c) required full excavation of AOC 9, AOC 40, SA 13, with on-site consolidation or off-site disposal options. In a separate evaluation after the ROD was issued, an evaluation of on-site versus off-site disposal options was conducted and disposal of the remedial debris in an on-site landfill to be built at the former golf course driving range on Patton Road was chosen (S&W, 2000a).”

Comment 12 – Page 12, Section 4.0 – Change the title of Section 4.0 to Regulatory Actions, Section 4.1 to Record of Decision & Remedial Action Objectives (RAOs) and add a Section 4.2 Remedy Description header.

Response: The title of Section 4.0 was changed to Regulatory Actions, Section 4.1 was changed to Record of Decision and Remedial Response Objectives, and a Section 4.2 Remedy Description header was added.

Subsequent Comment - Please see comment below.

Subsequent Response – Please clarify which comment below and if it was an original comment please clarify objection to provided response.

Comment 13 – Page 12, Section 4.1 – This section should be expanded to include a discussion of the ROD and RAOs specific to the contributor sites.

Response: The term “remedial response objectives” was used in the ROD; the term “remedial action objectives” was not used in the ROD. The remedial response objectives were reproduced directly from the ROD and address all the sites covered by the ROD (i.e., SA 6, SA 12, SA 13, AOC 9, AOC 11, AOC 40, and AOC 41). There were not additional remedial response objectives or remedial action objectives for individual sites developed in the ROD. No change to the Addendum text is needed.

Comment 16 – Page 17, Section 4.2, Remedial Action AOC 9, 4th paragraph – Please add S-1 to list of acronyms (with clear description of relevance as a residential cleanup goal).

Response: The text was clarified to read as follows:

“Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan [Stone & Webster (S&W), 2000b] by using PRGs for residential soil and/or Massachusetts Contingency Plan (MCP) S-1 soil standards, whichever was more stringent. Following verification that confirmatory sampling results met the PRGs/MCP S-1 values and the excavation limits had been reached, restoration activities commenced. Restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002).”

Subsequent Comment – Revise the text as follows:

“Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan [Stone & Webster (S&W), 2000b] by using PRGs for residential soil and/or Massachusetts Contingency Plan (MCP) S-1 soil standards, whichever was more stringent. Following verification that ~~confirmatory sampling results met the PRGs/MCP S-1 values and the~~ excavation limits had been reached, restoration activities commenced. Restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002).”

Subsequent Response: The text was revised per the comment.

Comment 17 – Page 23, Section 6.4 – As recommended in EPA’s 2016 “Five-Year Review Recommended Template” (OLEM -9200.0-89), the discussion of historic, confirmation soil sampling results has been removed since it is irrelevant to the technical assessment evaluation in the proceeding section. Specifically, it recommends that only those data collected since the last FYR, necessary to answer the three technical assessment question, be included. It also states that “all of the data collected and statistical analyses of these data should not be included, except where additional historical data may be needed to evaluate trends.

Response: All but the first sentence of Section 6.4 was deleted per the comment. The first sentence of Section 6.4 was revised as follows:

“No sampling was conducted at any of the DCL contributor sites since the last five-year review period, because long-term monitoring of the DCL contributor sites is not required under the selected remedial action.”

Subsequent Comment - The DCL contributors sites were not evaluated in the last (2010) FYR. Revise the text as follows:

“No sampling was conducted at any of the DCL contributor sites ~~since the last five-year review period~~, because long-term monitoring of the DCL contributor sites is not required under the selected remedial action.”

Subsequent Response: The text was revised per the comment.

Comment 18 – Page 28, Section 7.0, Question B, Changes in Standards and To Be Considered

– Please identify the specific standards “updated since the signing of the ROD in 1999” and explain why these changes would/do not affect the protectiveness determination.

Response: The text related to DCL construction was inadvertently included.

The second paragraph of Question B was revised as follows:

“Changes in Standards and To Be Considered – As the remedial work has been completed, the ARARs for soil contamination cited in the ROD (Appendix D) have been met. There have been no changes to these ARARs and no new standards or TBCs affecting the protectiveness of the remedy.

Excavation activities at DCL contributor sites AOCs 9, 40, and SA 13 were completed in 2003. Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan (S&W, 2000b) by using PRGs for residential soil and/or MCP S-1 soil standards, whichever was more stringent. PRGs were attained and verified through confirmation sampling. The remedial response objectives for soil specified in the ROD have been achieved. Contaminated soils were removed and placed in the DCL; therefore, changes to soil TBCs do not affect the protectiveness of the implemented remedy.”

Subsequent Comment: With respect to the first paragraph of the suggested text revision, EPA is unable to comment on this proposed language until issues/comments on the ARARs tables have been successfully resolved by EPA and Army legal staff. As such, EPA recommends that Army refrain from releasing the final DCL FYR Addendum until the materials in Appendix D have been approved/finalized.

With respect to the second paragraph of the suggested text revision, the entire paragraph should be deleted. The proposed language is incorrect and doesn’t accurately respond to technical Question B. Institutional Controls (IC) were required for AOCs 9 and 40 and Study Area (SA) 13 upon completion of excavation activities because residential soil PRGs and/or MCP S-1 soil standards (levels that allow for unlimited use and unrestricted exposure (UU/UE)) were not attained (and verified through confirmation sampling).

Subsequent Response: Comment noted with respect to the subsequent comment on the first paragraph.

With respect to the subsequent comment on the second paragraph, the text was revised per the comment.

Comment 26– Table B.2 Action to be Taken to Attain Requirement Column, 1st row – Please explain why the average concentration is compared to the MMCL/MCL at AOC 40 for purposes of determining attainment with this ARAR. Typically, the maximum concentration detected is used to determine compliance with drinking water standards.

Response: See response to Comment 21.

Subsequent Comment - EPA reiterates its original comment, which unlike the others, does not request a modification to ARARs. Rather it requests Army's explanation for why implementation of the ARAR occurs in a particular way. More specifically, EPA requests that Army explain "why the average concentration is compared to the MMCL/MCL at AOC 40 for purposes of determining attainment with this ARAR." The explanation is required to ensure that the remedy is protective.

Floodplain Regulations - 44 C.F.R. 9 should be included, as well as a note that it is an interpretation of Executive Order 11988. (4 C.F.R. 6 is the old regulation that dealt with Floodplain management and has since been rescinded). The Five-Year Review must address the change in the regulation and whether the remedy continues to be protective. See the table below for an example of how the current Floodplain Regulations could be included as ARARs (changes from old ARARs table highlighted in red):

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
Federal	Floodplains	Floodplain Management, 44 C.F.R. 9, Executive Order 11988	Applicable AOC 9 AOC 11 AOC 40	Federal Emergency Management Agency regulations that set forth the policy, procedure and responsibilities to implement and enforce Executive Order 11988, Floodplain Management.	Drum removal and hot-spot sediment removal will be designed to minimize alteration/destruction of floodplain area. If this alternative is chosen, wetlands adversely affected by remedial action will be restored to the extent necessary.
	Wetlands	Protection of Wetlands, 44 C.F.R. 9, Executive Order 11990	Applicable AOC 9 AOC 11 AOC 40	Under this Order, as implemented through 44 C.F.R. 9, federal agencies are required to minimize the destruction, loss, or degradation of wetlands, and preserve and enhance natural and beneficial values of wetlands. If remediation is required within wetland areas, and no practical alternative exists, potential harm must be minimized and action taken to restore natural and beneficial values.	Drum removal and hot-spot sediment removal will be designed to minimize alteration/destruction of floodplain area. If this alternative is chosen, wetlands adversely affected by remedial action will be restored to the extent necessary.

At the time of ROD issuance in July 1999, waste left in place within a floodplain only had to be floodproofed up to the 100-year storm elevation. Since current CERCLA remedies in Region 1 now require that waste left in place be floodproofed up to the 500-year flood elevation, Army should evaluate any DCL contributor sites where wastes remain to determine whether they are floodproofed sufficiently to prevent a release < a 500-year flood/storm event.

Because the remaining EPA comments relate to previously selected and finalized ARARs, and do not involve standards that have changed, EPA accepts Army's responses but requests that these comments (and all other EPA comments issued for the 2015 FYR Addendum for DCL Contributor Sites) be included in the final FYR Addendum in an appendix entitled "Regulatory Comments Received on the Draft DCL - 2015 5-Year Review Addendum DCL Contributor Sites".

Subsequent Response: Regarding the comment on "why the average concentration is compared to the MMCL/MCL at AOC 40 for purposes of determining attainment with this ARAR." Review of the HHRA in RI Addendum Report indicates that both the maximum and average groundwater concentrations were compared to the MCLs. The comparisons to MCLs should be evaluated in the context of the entire risk assessment (which concluded that exposure to groundwater downgradient of Cold Spring Brook Landfill will not result in unacceptable risk).

The first paragraph of Section 7.0, Question B, Changes in Standards To Be Considered" will be revised as follows: "Although changes in these standards do not affect current remedy protectiveness, amended floodplain management and wetland protection regulations require that Army monitor / maintain rip-rap and soil covers over any wastes left in place within a floodplain up to the 500-year storm elevation (versus the 100-year storm elevation required at the time of ROD issuance in 1999). These new regulations were enacted to ensure sufficient protection against a release of remaining waste during a flood/storm event."

The following text will be added at the beginning of Section 9.0: "In accordance with amended floodplain management and wetland protection regulations, Army will ensure protection of wastes left in place within a floodplain by monitoring, managing and repairing, if necessary, rip-rap and/or soil covers up to the 500-year flood elevation."

The various responses to regulatory comments will be included in Appendix A.

**U.S. ARMY RESPONSES TO
U.S. ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE
DRAFT FINAL 2015 FIVE YEAR REVIEW REPORT ADDENDUM
DEVENS CONSOLIDATED LANDFILL CONTRIBUTOR SITES AOC 9, 40 AND SA 13
FORMER FORT DEVENS ARMY INSTALLATION, DEVENS, MASSACHUSETTS
28 September 2018**

The following U.S. Army (Army) responses pertain to the U.S. Environmental Protection Agency (USEPA) comments, dated 20 August 2018, on the Army's 1 August 2018 response document. The August responses pertained to USEPA's comments dated 2 May and 13 June 2018 on the Army's previous responses to USEPA comments dated 2 February and 23 May 2018, on the *Draft Final 2015 Five Year Addendum Devens Consolidated Landfill (DCL) Contributor Sites AOC 9, 40 and SA 13* at the Former Fort Devens Army Installation, Devens, Massachusetts, dated October 2017. Only the follow-on USEPA comments that required additional responses are included herein. The related original comments are provided for reference.

EPA Follow-On Comment (August 20, 2018) – Page xi, Five-Year Review Summary Form – Please reformat the page such that the “Issues” discussion precedes the “Recommendations and Follow-Up Actions” discussion at the bottom of the page. Also, please change the entry for “Due Date” (at the bottom of the summary form) to “September 26, 2000 (*and every five years thereafter*).”

Response: The final version of the page will be formatted such that the “Issues” discussion precedes the “Recommendations and Follow-Up Actions” at the bottom of the page. Due to constraints of the red-line strike out operations, the final formatting will not be visible in the red-line strike out version of the text.

The entry for “Due Date” has been changed to “September 26, 2000 (*and every five years thereafter*).”

EPA Follow-On Comment (August 20, 2018) – Page 5, Section 3.1 – For clarity, please move “(Attachment A, Figure 2)” from the end of the second sentence to the beginning of the sentence, after “The DCL...” (as written, the text suggests that Figure 2 is in Attachment A of the September 2015 FYR).

Response: The text was revised per the comment.

Comment 13 (February 5, 2018) – Page 12, Section 4.1 – This section should be expanded to include a discussion of the ROD and RAOs specific to the contributor sites.

Response: The term “remedial response objectives” was used in the ROD; the term “remedial action objectives” was not used in the ROD. The remedial response objectives were reproduced directly from the ROD and address all the sites covered by the ROD (i.e., SA 6, SA 12, SA 13, AOC 9, AOC 11, AOC 40, and AOC 41). There were not additional remedial response objectives or remedial action objectives for individual sites developed in the ROD. No change to the Addendum text is needed.

EPA Follow-On (August 20, 2018): Acceptance of response contingent upon deletion of “landfill” (since the RROs “address all sites covered by the ROD (i.e., SA 6, SA 12, SA 13, AOC 9, AOC 11, AOC 40, and AOC 41)”).

Response: The first sentence of Section 4.1 was revised as follows:

“The remedial response objectives as defined by the 1999 ROD were:...”

Comment 16 (February 5, 2018) – Page 17, Section 4.2, Remedial Action AOC 9, 4th paragraph – Please add S-1 to list of acronyms (with clear description of relevance as a residential cleanup goal).

Response: The text was clarified to read as follows:

“Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan [Stone & Webster (S&W), 2000b] by using PRGs for residential soil and/or Massachusetts Contingency Plan (MCP) S-1 soil standards, whichever was more stringent. Following verification that confirmatory sampling results met the PRGs/MCP S-1 values and the excavation limits had been reached, restoration activities commenced. Restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002).”

Subsequent Comment (June 13, 2018)– Revise the text as follows:

“Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan [Stone & Webster (S&W), 2000b] by using PRGs for residential soil and/or Massachusetts Contingency Plan (MCP) S-1 soil standards, whichever was more stringent. Following verification that ~~confirmatory sampling results met the PRGs/MCP S-1 values and the~~ excavation limits had been reached, restoration activities commenced. Restoration activities were completed in accordance with the Habitat Restoration Work Plan (S&W, 2002).”

Subsequent Response: The text was revised per the comment.

EPA Follow-On (August 20, 2018): Acceptance of response contingent upon identification/inclusion of the specific PRGs for residential soil and MCP S-1 soil standards (as requested in EPA’s February 2, 2018 comments) and replacement of existing text in the second to last paragraphs for AOC 40 and SA 13 with the revised text (in green) above. Since available confirmatory sample data did not verify attainment of PRGs (for residential use) or MCP S-1 soil standards, language pertaining to confirmatory results and attainment of PRGs/S-1 standards must be deleted. Army must prepare an updated baseline risk assessment for regulatory review and concurrence to confirm attainment of UU/UE (residential) cleanup standards (and support removal of existing ICs).

Response: The text in the second to last paragraphs for AOC 40 and SA 13 were revised per the comment. The PRGs were added as Appendix E and a reference to Appendix E was added to Section 4.3.

Comment 17 – Page 23, Section 6.4 – As recommended in EPA’s 2016 “Five-Year Review Recommended Template” (OLEM -9200.0-89), the discussion of historic, confirmation soil sampling results has been removed since it is irrelevant to the technical assessment evaluation in the proceeding section. Specifically, it recommends that only those data collected since the last FYR, necessary to answer the three technical assessment question, be included. It also states that “all of the data collected and statistical analyses of these data should not be included, except where additional historical data may be needed to evaluate trends.

Response: All but the first sentence of Section 6.4 was deleted per the comment. The first sentence of Section 6.4 was revised as follows:

“No sampling was conducted at any of the DCL contributor sites since the last five-year review period, because long-term monitoring of the DCL contributor sites is not required under the selected remedial action.”

Subsequent Comment - The DCL contributor sites were not evaluated in the last (2010) FYR. Revise the text as follows:

“No sampling was conducted at any of the DCL contributor sites ~~since the last five-year review period~~, because long-term monitoring of the DCL contributor sites is not required under the selected remedial action.”

Subsequent Response: The text was revised per the comment.

EPA Follow-On: Response accepted.

EPA Follow-On Comment (August 20, 2018) – Section 6.6 – Please insert “, including photos documenting site conditions,” after “Site Inspection reports” in the last sentence.

Response: The text was revised per the comment.

Comment 18 (February 5, 2018) – Page 28, Section 7.0, Question B, Changes in Standards and To Be Considered

– Please identify the specific standards “updated since the signing of the ROD in 1999” and explain why these changes would/do not affect the protectiveness determination.

Response: The text related to DCL construction was inadvertently included. The second paragraph of Question B was revised as follows:

“Changes in Standards and To Be Considered – As the remedial work has been completed, the ARARs for soil contamination cited in the ROD (Appendix D) have been met. There have been no changes to these ARARs and no new standards or TBCs affecting the protectiveness of the remedy.

Excavation activities at DCL contributor sites AOCs 9, 40, and SA 13 were completed in 2003. Cleanup goals for the disposal areas were established in the Sampling and Analysis Plan (S&W, 2000b) by using PRGs for residential soil and/or MCP S-1 soil standards, whichever was more stringent. PRGs were attained and verified through confirmation sampling. The remedial response objectives for soil specified in the ROD have been achieved. Contaminated soils were removed and placed in the DCL; therefore, changes to soil TBCs do not affect the protectiveness of the implemented remedy.”

Subsequent Comment (June 13, 2008): With respect to the first paragraph of the suggested text revision, EPA is unable to comment on this proposed language until issues/comments on the ARARs tables have been successfully resolved by EPA and Army legal staff. As such, EPA recommends that Army refrain from releasing the final DCL FYR Addendum until the materials in Appendix D have been approved/finalized.

With respect to the second paragraph of the suggested text revision, the entire paragraph should be deleted. The proposed language is incorrect and doesn’t accurately respond to technical Question B. Institutional Controls (IC) were required for AOCs 9 and 40 and Study Area (SA) 13 upon completion of excavation activities because residential soil PRGs and/or MCP S-1 soil standards (levels that allow for unlimited use and unrestricted exposure (UU/UE)) were not attained (and verified through confirmation sampling).

Subsequent Response: Comment noted with respect to the subsequent comment on the first paragraph.

With respect to the subsequent comment on the second paragraph, the text was revised per the comment.

EPA Follow-On (August 20, 2018): Response unacceptable for the reasons outlined below.

- a) The deleted language (in the now third paragraph) should be reinserted in the document. Specifically, the first paragraph after “Change in Standards and To Be Considered” should read, “As part of this FYR Addendum, ARARs for the sites presented in the 1999 ROD (Appendix D) were reviewed to identify potential changes, if any, to standards and/or regulatory requirements since issuance of the ROD that could affect current remedy protectiveness.”
- b) As first requested in EPA’s February 2, 2018 comments, this section must identify, *by name and citation*, any ARAR cited in the 1999 ROD that has changed since ROD issuance and/or “new” (post-1999) ARAR (i.e. regulation, guidance, TBC, etc.) that would appear in an ARARs table for the same remedy if the ROD was issued today (in 2018). While EPA is aware of Army’s reluctance to make changes/updates to the ARARs tables as they appeared in the 1999 ROD, it must, at a minimum, identify any such changes/additions and state whether those changes/additions affect current remedy protectiveness.
- c) Although EPA appreciates Army’s inclusion of the requested text regarding the amended floodplain management and wetland protection regulations, this language should proceed the applicable regulatory citations, “44 C.F.R.9, Executive Order 11988” (Floodplain Management) and “44 C.F.R.9, Executive Order 11990” (Protection of Wetlands).
- d) It is still unclear why Army has excluded a discussion of the “standards relative to landfill remediation and construction” that have been mentioned in every prior draft submission. For reasons previously discussed, even if they do not affect the protectiveness of the remedy, they need to be identified and included in this discussion.
- e) For reasons discussed in Comment 16 above, please delete the highlighted portion of Army’s proposed, revised text (see above).
- f) EPA requests that in lieu of making formal changes to the 1999 ARARs table that any changed, added, or updated ARAR identified in this section be included in a “List of Amended ARARs That Do Not Affect Current Remedy Protectiveness” to be included as an attachment the ARARs tables in Appendix D (as maybe “Appendix D-1”) or included in a separate Appendix E. This will give personnel working on subsequent FYRs review a “head start” in identifying and evaluating post-ROD ARARs changes.

Response:

- a) The ARARs from the ROD were included as Appendix D-1. The following text was inserted as the first paragraph after “Change in Standards and To Be Considered”:

“As part of this Addendum, ARARs for the sites presented in the ROD (Appendix D-1) were reviewed to identify potential changes, if

any, to standards and/or regulatory requirements since issuance of the ROD that could affect current remedy protectiveness.”

- b) The ARARs revised since the ROD were included as Appendix D-2.
- c) The following text was inserted at the end of the second paragraph:
“The new regulations are 44 CFR 9, Executive Order 11988 (Floodplain Management) and 44 CFR 9, Executive Order 11990 (Protection of Wetlands). The new regulations are summarized in Appendix D-2.”
- d) As indicated in the original response, the text related to DCL construction was inadvertently included. The Addendum is focused on the contributor sites, the DCL remedial action and ARARs related to construction of the DCL is addressed the 2015 Five-Year Review Report.
- e) The EPA comment indicates the following text should be deleted from Section 7.0: “PRGs were attained and verified through confirmation sampling. The remedial response objectives for soil specified in the ROD have been achieved.” The entire paragraph was deleted per EPA’s specific direction in the subsequent comment to response to Comment 18.
- f) The ARARs revised since the ROD was signed as provided by EPA in the June 13, 2018 comment in the response Comment 26 was included as Appendix D-2.

EPA Follow-On Comment (August 20, 2018): Section 7.0, Question B, Changes in Standards and To Be Considered, Changes in Toxicity and Other Contaminant Characteristics and Changes in Risk Assessment Methods – For reasons previously discussed, current statements regarding the extent (i.e. thoroughness) of soil excavation activities at the DCL contributor sites and effect of changes in standards and exposure parameters on remedy protectiveness are incorrect. Because residential soil PRGs and/or MCP S-1 soil standards (levels that allow for unlimited use and unrestricted exposure (UU/UE)) were *not* attained (and verified through confirmation sampling), all post-ROD changes in toxicity standards and/or risk assessment methodology, such as the changes in determining dermal contact exposures noted in the second to last paragraph of this section, must be identified and evaluated in the 2015 FYR Report. Please amend these sections to identify these specific changes and indicate whether these changes affect current remedy protectiveness.

Response: As indicated in the text, even though methods for reevaluating dermal contact exposure have changed, including some exposure assumptions and toxicity values, residential exposure has been eliminated through prevention of residential development. Therefore, the risk assessment methodology changes do not affect the protectiveness of the remedy.

It should be noted that the PRGs were substantially met during the remedial action as the majority of the confirmatory samples did not exceed the benchmarks. There were no exceedences of PRGs at SA 13, only 1 minor exceedance out of 32 samples at AOC 9 (only for one compound, benzo(a)pyrene, at 0.31 mg/kg compared to a PRG of 0.062 mg/kg), and only 3 out of 23 samples at AOC 40.

Comment 26 (February 5, 2018)– Table B.2 Action to be Taken to Attain Requirement Column, 1st row – Please explain why the average concentration is compared to the MMCL/MCL at AOC 40 for purposes of determining attainment with this ARAR. Typically, the maximum concentration detected is used to determine compliance with drinking water standards.

Response: See response to Comment 21.

Subsequent Comment (June 13, 2018) – EPA reiterates its original comment, which unlike the others, does not request a modification to ARARs. Rather it requests Army's explanation for why implementation of the ARAR occurs in a particular way. More specifically, EPA requests that Army explain "why the average concentration is compared to the MMCL/MCL at AOC 40 for purposes of determining attainment with this ARAR." The explanation is required to ensure that the remedy is protective.

Floodplain Regulations - 44 C.F.R. 9 should be included, as well as a note that it is an interpretation of Executive Order 11988. (4 C.F.R. 6 is the old regulation that dealt with Floodplain management and has since been rescinded). The Five-Year Review must address the change in the regulation and whether the remedy continues to be protective. See the table below for an example of how the current Floodplain Regulations could be included as ARARs (changes from old ARARs table highlighted in red):

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
Federal	Floodplains	Floodplain Management, 44 C.F.R. 9, Executive Order 11988	Applicable AOC 9 AOC 11 AOC 40	Federal Emergency Management Agency regulations that set forth the policy, procedure and responsibilities to implement and enforce Executive Order 11988, Floodplain Management.	Drum removal and hot-spot sediment removal will be designed to minimize alteration/destruction of floodplain area. If this alternative is chosen, wetlands adversely affected by remedial action will be restored to the extent necessary.
	Wetlands	Protection of Wetlands, 44 C.F.R. 9, Executive Order 11990	Applicable AOC 9 AOC 11 AOC 40	Under this Order, as implemented through 44 C.F.R. 9, federal agencies are required to minimize the destruction, loss, or degradation of wetlands, and preserve and enhance natural and beneficial values of wetlands. If remediation is required within wetland areas, and no practical alternative exists, potential harm must be minimized and action taken to restore natural and beneficial values.	Drum removal and hot-spot sediment removal will be designed to minimize alteration/destruction of floodplain area. If this alternative is chosen, wetlands adversely affected by remedial action will be restored to the extent necessary.

At the time of ROD issuance in July 1999, waste left in place within a floodplain only had to be floodproofed up to the 100-year storm elevation. Since current CERCLA remedies in Region 1 now require that waste left in place be floodproofed up to the 500-year flood elevation, Army should evaluate any DCL contributor sites where wastes remain to determine whether they are floodproofed sufficiently to prevent a release < a 500-year flood/storm event.

Because the remaining EPA comments relate to previously selected and finalized ARARs, and do not involve standards that have changed, EPA accepts Army's responses but requests that these comments (and all other EPA comments issued for the 2015 FYR Addendum for DCL Contributor Sites) be included in the final FYR Addendum in an appendix entitled "Regulatory Comments Received on the Draft DCL - 2015 5-Year Review Addendum DCL Contributor Sites".

Subsequent Response: Regarding the comment on "why the average concentration is compared to the MMCL/MCL at AOC 40 for purposes of determining attainment with this ARAR." Review of the HHRA in RI Addendum Report indicates that both the maximum and average groundwater concentrations were compared to the MCLs. The comparisons to MCLs should be evaluated in the context of the entire risk assessment (which concluded that exposure to groundwater downgradient of Cold Spring Brook Landfill will not result in unacceptable risk).

The first paragraph of Section 7.0, Question B, Changes in Standards To Be Considered" will be revised as follows: *"Although changes in these standards do not affect current remedy protectiveness, amended floodplain management and wetland protection regulations require that Army monitor / maintain rip-rap and soil covers over any wastes left in place within a floodplain up to the 500-year storm elevation (versus the 100-year storm elevation required at the time of ROD issuance in 1999). These new regulations were enacted to ensure sufficient protection against a release of remaining waste during a flood/storm event."*

The following text will be added at the beginning of Section 9.0: *"In accordance with amended floodplain management and wetland protection regulations, Army will ensure protection of wastes left in place within a floodplain by monitoring, managing and repairing, if necessary, rip- rap and/or soil covers up to the 500-year flood elevation."*

The various responses to regulatory comments will be included in Appendix A.

EPA Follow-On (August 20, 2018): Response unacceptable. While the information provided in Army's response is helpful, further clarification is warranted. Specifically, Army states that both the maximum and average groundwater concentrations were compared to MCLs, but this does not necessarily equate to compliance with the ARAR. The ARAR (in Table B.2) requires that *any exceedance* of the MCL means non-compliance with the ARAR. Thus, if Army based its determination of "no unacceptable risk" on the *average* (rather than the maximum) values, then this could be problematic. Even if the average does not exceed the MCL, the maximum may exceed the MCL (which would result in noncompliance and a lack of protectiveness). Please clarify that the risk assessment not only compared maximum groundwater concentrations to the MCLs, but also relied on these comparisons to ensure that there were no exceedances of the MCL. If both the averages and maximums were compared (as Army states above), but the average concentrations were the only values applied to determine risk acceptability, then there needs to be more discussion of the maximum values and whether they exceeded the MCLs. Hopefully, this is a non-issue, but Army (and EPA) must confirm that no maximum groundwater concentrations exceeded the MCLs to conclude that the remedy is protective.

Response: As indicated in the ROD for AOC 40, even though bis(2-ethylhexyl)phthalate (BEHP) was detected at elevated concentrations and resulted in risks in groundwater above the EPA point of departure, it is possible BEHP concentrations reported in AOC 40 samples resulted from laboratory contamination. The risk assessment results were evaluated and even though the risks were above EPA guidance values, because there is not residential groundwater exposure under current land use conditions there is no carcinogenic risk and the noncancer risks were overestimated. Because there was no current or potential future risk above the EPA point of departure to groundwater, the remedy does not include a groundwater monitoring component to assess if the remedy is protective of groundwater through attainment of federal or state drinking water regulations. The remedy is protective of groundwater through removal of the potential, future threat of contaminant release to area groundwater.



APPENDIX B

**Institutional Control Instruments – Quit Claim Deed-Parcels A2A,
A4, and A8 (dated 03/07/2006)**

Quitclaim Deed

Parcels A2A, A4 & A8



2006 00032800

Bk: 38514 Pg: 121 Doc: DEED
Page: 1 of 48 03/07/2008 10:32 AM

WHEREAS, pursuant to the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510, as amended, and codified at 10 U.S.C. 2687, note) ("BRAC"), the United States of America, acting by and through the Department of the Army (referred to hereinafter as the "Army" or "Grantor"), closed the military installation located at Fort Devens Massachusetts ("Fort Devens"), and has made a final disposal decision with respect thereto; and

WHEREAS, pursuant to Chapter 498 of the Massachusetts Acts of 1993 as amended, the Massachusetts Development Finance Agency (referred to hereinafter as "MassDevelopment" or "Grantee"), successor in interest to the Government Land Bank under Chapter 289 of the Acts of 1998, notice of which was recorded on October 7, 1998, with the Worcester District Registry of Deeds in **Book 20505, Page 279**, and with the Middlesex County, Southern District, Registry of Deeds in **Book 29188, Page 568**, was granted the exclusive authority to oversee and implement the civilian reuse of Fort Devens in accordance with a locally approved reuse plan and bylaws and designated as the Local Redevelopment Authority under BRAC; and

WHEREAS, pursuant to a Memorandum of Agreement ("MOA") entered into between the Grantor and the Grantee on May 9, 1996, as amended from time to time, the Grantor transferred certain portions of Fort Devens to the Grantee by quitclaim deed dated May 9, 1996, recorded with the Middlesex County, Southern District, Registry of Deeds in **Book 26317, Page 003**, and with the Worcester District Registry of Deeds in **Book 17907, Page 001**, and leased certain other portions of Fort Devens (the "Leased Parcel") to the Grantee through a Lease in Furtherance of Conveyance ("Lease"), a Notice of Lease dated May 9, 1996 (the "Notice of Lease"), recorded with the Middlesex County, Southern District, Registry of Deeds in **Book 26340, Page 168**, and with the Worcester District Registry of Deeds in **Book 17922, Page 223**, pending the completion of certain environmental clean-up activities on the Leased Parcel by the Grantor; and

WHEREAS, the terms of the MOA provide, among other things, that upon the completion of the environmental clean-up of any of the Leased Parcel pursuant to: applicable law, the approval of a Finding of Suitability of Transfer ("FOST") by the Grantor, the United States Environmental Protection Agency ("EPA") and the Massachusetts Department of Environmental Protection ("DEP"); and, in accordance with the Department of Defense policy guidance, the Grantor will convey said Leased Parcel(s) to the Grantee for consideration of less than one hundred dollars (\$100.00);

WHEREAS, the FOST for Leased Parcels A2A, A4 and A8, said parcels being identified on a plan entitled "Plan of Land Conveyed to the Government Land Bank by the Secretary of the Army, Ayer, Harvard and Shirley MA" (the "Leased Parcel Plan") dated May 9, 1996, recorded with the Worcester District Registry of Deeds in **Plan Book 703, Plan 112**, and with the Middlesex County, Southern District, Registry of Deeds, as

North Side of Patten Road, Harvard, Massachusetts
and Western side of Lake George Street, Harvard, MA

Plan 500 of 1996, was approved by the Grantor in accordance with the applicable Department of Defense policy guidelines, the EPA and DEP.

WHEREAS, the Grantee has requested and the Grantor has agreed to convey Leased Parcels A2A, A4 and A8 to the Grantee.

KNOW ALL MEN BY THESE PRESENTS: that the UNITED STATES OF AMERICA, acting by and through the DEPUTY ASSISTANT SECRETARY OF THE ARMY (Installations and Housing) (hereinafter "Grantor"), pursuant to a delegation of authority from the Secretary of the Army, under and pursuant to the Defense Base Closure and Realignment Act of 1990, Public Law 101-510, as amended, codified at 10 U.S.C. § 2687 note ("BRAC") and the Federal Property and Administrative Service Act of 1949, as amended, for the utilization and disposal of excess and surplus property at closed and realigned military installations, for consideration paid of less than \$100.00 the receipt and sufficiency of which is hereby acknowledged, does hereby grant, remise, release, and forever quitclaim unto the Massachusetts Development Finance Agency, their successors and assigns, (hereinafter "Grantee"), a Massachusetts body politic and corporate created by Chapter 23G of the Massachusetts General Laws and successor in interest to the Government Land Bank, having a principal place of business located at 160 Federal Street, 7th Floor, Boston, Massachusetts 02110, and designated as the Local Redevelopment Authority under BRAC, all its right, title, and interest in and to: Leased Parcel A2A, consisting of 18.5± acres, of land located in the Devens Regional Enterprise Zone, Town of Shirley, Middlesex County, Commonwealth of Massachusetts; Leased Parcel A4, consisting of 16± acres, of land located in the Devens Regional Enterprise Zone, Town of Harvard, Worcester County, Commonwealth of Massachusetts; and Leased Parcel A8, consisting of 9.7± acres, of land located in the Devens Regional Enterprise Zone, Town of Harvard, Worcester County, Commonwealth of Massachusetts (hereinafter all three Parcels shall be called the "Property"), and shown on Leased Parcel Plan and more particularly described in Exhibit A, attached hereto and made a part hereof, and in the Notice of Lease. The Grantor and the Grantee hereby release any and all rights in the Property under said Notice of Lease, and under the Lease referenced therein, it being agreed that the Lease shall remain in full force and effect with regard to the other Leased Parcels not being conveyed hereunder.

The Property includes:

1. all buildings, facilities, utility systems, utilities, utility lines and poles, conduits, infrastructure, roadways, railroads, bridges, and improvements thereon and appurtenances thereto, if any;
2. all easements, reservations, and other rights appurtenant thereto;
3. all hereditaments and tenements therein and reversions, remainders, issues, profits, and other rights belonging or related thereto; and
4. all mineral rights.

The legal description of the Property, attached hereto as Exhibit A, has been prepared by the Grantee and the Grantee shall be responsible for the accuracy of the description of the Property conveyed herein and shall indemnify and hold the Grantor harmless from any and all liability resulting from any inaccuracy in the description.

I. CERCLA COVENANTS AND NOTICE

Pursuant to Section 120(h)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. § 9601 et seq. ("CERCLA"):

A. The Grantor hereby notifies the Grantee of the storage, release, and disposal of hazardous substances, as defined under Section 101 of CERCLA, on the Property. Available information regarding the type, quantity, and location of such hazardous substances and actions taken with regard to the Property is set forth in the Finding of Suitability to Transfer ("FOST"), attached hereto as Exhibit B. The information regarding the storage, release, and disposal of any hazardous substances on the Property indicates that there is "No Significant Risk" to human health and the environment and a Class A-2 Response Action Outcome has been achieved for the Property, as defined under the Massachusetts Contingency Plan (310 CMR 40.0000).

B. The Grantor hereby covenants that:

1. all remedial action necessary to protect human health and the environment with respect to any such hazardous substances remaining on the Property has been taken prior to the date of conveyance hereunder; and

2. any additional remedial action found to be necessary with regard to such hazardous substances after the date of the conveyance that resulted from past activities of the Grantor shall be conducted by the Grantor except as otherwise provided under Section 120(h) of CERCLA. Except as provided under Section 120(h) of CERCLA and this Quitclaim Deed, the Grantor assumes no liability for additional response action or corrective action, found to be necessary after the date of transfer, in any case in which the person or entity to whom the Property is transferred, or other non-Army entities, is identified as the party responsible for contamination of the Property.

The Grantee shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the provisions of this Section I, and shall require the inclusion of such provisions of this Section I in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

II. ACCESS RIGHTS RESERVED UNDER CERCLA

In accordance with Federal Facilities Agreement ("FFA"), May 11, 1991 and as amended March 26, 1996, the Grantor, the Environmental Protection Agency ("EPA") and Commonwealth of Massachusetts Department of Environmental Protection ("DEP") and their officers, agents, employees, contractors, and subcontractors have the right, upon reasonable notice to the Grantee, to enter upon the Property in any case in which a response action or corrective action is found to be necessary, after the date of transfer of the Property, such access is necessary to carry out a response action or corrective action on adjoining property, including, without limitation, the following purposes:

1. To conduct investigations and surveys, including, where necessary, drilling, soil and water sampling, testing-pitting, test soil borings and other activities;
2. To inspect field activities of the Grantor and its contractors and subcontractors;
3. To conduct any test or survey related to the environmental conditions at the Property or to verify any data submitted to the EPA or DEP by the Grantor relating to such conditions;
4. To construct, operate, maintain or undertake any other response or remedial actions as required or necessary including, but not limited to monitoring wells, pumping wells and treatment facilities

In exercising the rights hereunder, the Grantor shall give the Grantee or its successors or assigns reasonable notice of actions to be taken on the Property pursuant to this reserved easement and shall, to the extent reasonable, consistent with the FFA defined hereunder and applicable law and regulation, and at no additional cost to the Grantor, and endeavor to minimize the disruption to the Grantee's, its successors', or assigns' use of the Property.

The Grantee shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the provisions of this Section II, and shall require the inclusion of such provisions of this Section II in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

III. FEDERAL FACILITIES AGREEMENT

By accepting this deed, the Grantee acknowledges that the Grantor has provided the Grantee with a copy of the FFA. The Grantor shall provide the Grantee with a copy of any future amendments to the FFA.

A. The Grantor, EPA, The Commonwealth of Massachusetts, and their respective agents, employees, and contractors, shall have such access to, over and through the Property as may be necessary for any investigation, response, or corrective action pursuant to CERCLA or the FFA found to be necessary before or after the date of this Deed on the Property or on other property comprising the Fort Devens National Priorities List (the "NPL") site. This reservation includes the right of access to, and use of, to the extent permitted by law, any available utilities at reasonable cost to the Grantor, EPA and DEP.

B. In exercising the rights hereunder, the Grantor, The Commonwealth of Massachusetts and the EPA shall give the Grantee or its successors or assigns reasonable notice of actions taken on the Property under the FFA and shall, to the extent reasonable, consistent with the FFA, and at no additional cost to the Grantor, The Commonwealth of Massachusetts and the EPA endeavor to minimize the disruption to the Grantee's, its successors' or assigns' use of the Property.

C. The Grantee agrees that notwithstanding any other provision of this Deed, the Grantor assumes no liability to the Grantee, its successors or assigns, or any other person, should implementation of the FFA interfere with the use of the Property. The Grantee and its successors and assigns shall have no claim on account of any such interference against the Grantor or The Commonwealth of Massachusetts, EPA or any officer, agent, employee, or contractor thereof.

D. Prior to the determination by the Grantor, EPA and DEP that all remedial action is complete under CERCLA and the FFA on the Property, the Grantee, its successors and assigns, shall not undertake activities on the Property that would interfere with or impede the completion of the CERCLA clean-up on the Property and shall give prior written notice to the Grantor, the EPA, and The Commonwealth of Massachusetts, acting by and through the DEP, of any construction, alterations, or similar work on the Property that may interfere with or impede said clean-up.

E. The Grantee, its successors and assigns shall comply with any institutional controls established or put in place by the Grantor, EPA or DEP relating to the Property which are required by any FOST or Record of Decision ("ROD") or amendments thereto related to the Property, which ROD shall be approved by the Grantor and EPA and issued by the Grantor pursuant to CERCLA or the FFA before or after the date of this deed. Additionally, the Grantee shall ensure that any leasehold it grants in the Property or any fee interest conveyance of any portion of the Property provides for legally-binding compliance with the institutional controls required by any such FOST or ROD.

F. For any portion of the Property subject to a response action under CERCLA or the FFA, prior to the conveyance of an interest therein, the Grantee shall include in all conveyances provisions for allowing the continued operation of any monitoring wells, treatment facilities, or other response activities undertaken pursuant to CERCLA or the FFA on said portion of the Property and shall notify the Grantor, EPA,

and the DEP by certified mail, at least thirty (30) days prior to any such conveyance of an interest in said Property, which notice shall include a description of said provisions allowing for the continued operation of any monitoring wells, treatment facilities, or other response activities undertaken pursuant to CERCLA or the FFA.

G. The Grantee and all subsequent transferees of an interest in any portion of the Property will provide copies of the instrument evidencing such transaction to the DEP, the EPA, and the Grantor by certified mail, within fourteen (14) days after the effective date of such transaction.

H. The Grantee and all subsequent transferees shall include the provisions of this Section III in all subsequent leases, transfer, or conveyance documents relating to the Property or any portion thereof that are entered into prior to a determination by the Grantor that all remedial action is complete at the Fort Devens NPL site.

IV. FINAL BASE-WIDE ENVIRONMENTAL BASELINE SURVEY AND FOST.

The Grantee has received the technical environmental reports, including the Final Base-Wide Environmental Baseline Survey prepared by Arthur D. Little, Inc. dated March 1996 (the "Base-Wide EBS"); and the individual FOST for the Property is attached hereto as Exhibit B, prepared by, or on behalf of, the Grantor, the Grantee, and others, and Grantor agrees, to the best of the Grantor's knowledge, that said FOST accurately describes the environmental conditions of the Property. The Grantee has inspected the Property and accepts the physical condition and current level of known hazardous substances on the Property as disclosed in the FOST and/or the Base-Wide EBS and deems the Property to be safe for the Grantee's intended use. If, after conveyance of the Property to the Grantee, there is an actual or threatened release of a hazardous substance (as defined under Section 101 of CERCLA) on, under, or from the Property, or in the event that a hazardous substance is discovered on or under the Property after the date of the conveyance hereof, whether or not such hazardous substance was set forth in the technical environmental reports, including the individual FOST's or the Base-Wide EBS, Grantee or its successors or assigns shall be responsible for such release or newly discovered hazardous substance unless the Grantee is able to demonstrate that such release or such newly discovered hazardous substance was due to Grantor's prior activities, ownership, use, or occupation of the Property, or the activities of the Grantor's contractors, employees, and/or agents. The Grantee, its successors and assigns, and as consideration for the conveyance, agree to release the Grantor from any liability or responsibility for any claims arising out of or in any way predicated on the release of any hazardous substance on the Property occurring after the conveyance, where such hazardous substances were placed on the Property by the Grantee, or its agents, employees, invitees, or contractors, after the conveyance.

V. **"AS IS"**

The Property and personal property located thereon is conveyed under this Deed in an "as is, where is" condition, without any representation or warranty whatsoever by the Grantor concerning the state of repair or condition of said Property, unless otherwise noted herein.

VI. **WETLANDS AND FLOODPLAINS**

A. General Provisions

The Property may contain wetlands protected under state, federal and local laws and regulations. Applicable laws and regulations restrict activities that involve draining wetlands or the discharge of fill materials into wetland areas, including, without limitation, the placement of fill materials; the building of any structure; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and dams and dikes. To fulfill the Grantor's commitment in the Fort Devens Disposal and Reuse Environmental Impact Statement Record of Decision, made in accordance with the National Environmental Policy Act of 1969, 42 U.S.C. § 4321 *et seq.*, this deed provides for protection of wetlands beyond what would otherwise specifically be required under federal and state law.

B. Wetlands Protection

To protect water quality, groundwater recharge, and wildlife habitat, the Grantee, its successors, and assigns shall restrict activities within and protect any wetlands on the Property herein conveyed as provided for in Article VII.C. of the Devens By-Laws, dated November 18, 1994, and approved by the towns of Ayer, Harvard, and Shirley on December 7, 1994, Article VII.C. of the Devens By-Laws may be amended from time to time in accordance with applicable law, provided that any such amendment will not affect the obligation of the Grantee and its successors and assigns hereunder to comply with Article VII.C. of the Devens By-Laws, in its form as of the date of this Deed, unless such amendment receives the written consent of the DEP.

B. Enforcement

The Grantee covenants for itself, its successors, and assigns that the Grantee, its successors and assigns shall include, and otherwise make legally binding, the restrictions in this Section VI in all subsequent leases, transfer, or conveyance documents relating to the Property, provided that the Property contains wetlands protected by applicable state or federal law. The restrictions and protections provided for in this Section VI shall run with the land. The restrictions in this Section VI benefit the lands retained by the Grantor that formerly comprised Fort Devens, as well as the public generally. The Grantor and/or The Commonwealth of Massachusetts shall have the right to enforce the wetlands

restrictions provided for in this Section by appropriate legal proceedings and to obtain injunctive and other equitable relief against any violations, including, without limitation, relief requiring restoration of any of the Property to its condition prior to the time of the injury complained of, and shall be in addition to, and not in limitation of, any other rights and remedies available to the Grantor and The Commonwealth of Massachusetts.

VII. NOTICE OF THE PRESENCE OF ASBESTOS

A. The Grantee is hereby informed and does acknowledge that the former buildings located on the Property may have contained friable and non-friable asbestos or asbestos-containing materials ("ACM") as identified in the FOST, the Base-Wide EBS and the Area Requiring Environmental Evaluation 65 ("AREE 65") prepared for the Grantor by Arthur D. Little, Inc., dated May 1995.

B. The Grantee covenants and agrees that its use and occupancy of the Property will be in compliance with all applicable laws relating to asbestos, and that the Grantor assumes no liability for any future remediation of asbestos or damages for personal injury, illness, disability, or death, to the Grantee, its successors or assigns, or to any other person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with asbestos or ACM on the Property, whether the Grantee, its successors or assigns have properly warned or failed to properly warn the individual(s) injured. The Grantee assumes no liability for damages or remediation for personal injury, illness, disability, death or property damage arising from (i) any exposure to asbestos or ACM that resulted prior to the Grantor's conveyance of such portion of the Property to the Grantee pursuant to this Deed or any leases entered into between the Grantor and Grantee, or (ii) any disposal or mishandling of asbestos or ACM by the Grantor prior to the Grantor's lease or deed conveyance of the Property to the Grantee.

C. The Grantee agrees to be responsible for any future remediation of asbestos identified in the Base-Wide EBS, the FOST, or AREE 65 which is determined to be necessary on the Property after the date of the Lease. The Grantor assumes no liability for damages or remediation for personal injury, illness, disability, death or property damage arising from: (i) any exposure to asbestos or ACM that resulted due to the Grantee's failure to comply with any legal requirements applicable to asbestos on any portion of the Property, or (ii) any disposal of asbestos or ACM after the date of lease or deed conveyance of the Property to the Grantee.

D. The Grantee further agrees to bear full responsibility for and discharge the Grantor, its officers, agents and employees, from and against all suits, claims, demands or actions, liabilities, judgments, costs and attorneys' fees to the extent arising out of, or in any manner predicated upon, exposure to asbestos, identified in the Base-Wide EBS, the FOST, or AREE 68 on any portion of the Property, which exposure occurs after the date

of lease or deed conveyance of the Property to the Grantee, or any future remediation or abatement of asbestos on any portion of the Property or the need therefore.

E. The Grantee acknowledges that it has had the opportunity to inspect the Property as to asbestos content and condition and any hazardous or environmental conditions related thereto. The failure of the Grantee to inspect or to be fully informed regarding the content or quantity of ACM as described in the Base-Wide EBS will not constitute grounds for any claim or demand against the Grantor, except as may be otherwise provided in this Deed.

VIII. NOTICE OF THE PRESENCE OF UNDERGROUND STORAGE TANKS

The Grantee is hereby informed and does acknowledge that underground storage tanks (USTs) may have been located on the Property, as described in the Base-Wide EBS and/or the FOST. The Grantee has further been informed by the Grantor that all USTs that have been removed from the Property were tested at the time of removal, and any contamination identified was removed or remediated prior to backfilling.

IX. RADON NOTIFICATION

The Grantee hereby acknowledges receipt of the available radon assessment data pertaining to the former Fort Devens, which are located in the Base-Wide EBS. There are no structures or buildings on the Property, but the radon assessment data indicate that certain buildings at Fort Devens had levels of radon above EPA's radon reduction level of 4 picocuries/liter. A radiation induced increased risk of contracting lung cancer is the primary health concern with elevated levels of indoor radon. The Grantee acknowledges that it has had the opportunity to inspect the Property as to radon levels prior to accepting the Property. Failure of the Grantee to inspect or to be fully informed as to the radon levels of the Property and the former Fort Devens will not constitute grounds for any claim or demand against the United States. The Grantee further agrees to bear full responsibility for and discharge the Army from and against all suits, claims, demands, or actions, liabilities, judgments, costs and attorneys' fees to the extent arising out of, or in any manner predicated upon personal injury, death or property damage resulting from, related to, caused by or arising out of exposure to radon on any portion of the Property after conveyance of the Property or any future redemption or abatement of radon or the need therefore.

The Grantee shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the provisions of this Section IX and shall require the inclusion of such provisions of this Section IX in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

X. NOTICE OF THE PROGRAMMATIC AGREEMENT

The Grantee agrees to comply with applicable provisions of the Programmatic Agreement among the Grantee, the Advisory Council on Historic Preservation, and the Massachusetts Historic Commission dated March 20, 1996, (the "Programmatic Agreement") which pertain or otherwise apply to the Property. The Programmatic Agreement regulates those activities that may affect structures, facilities, or cultural or archeological sites eligible for, or listed on, the National Register of Historic Places.

XI. MEC NOTIFICATION

The Grantor completed a comprehensive records search, and based on that search, has undertaken and completed statistical and physical testing of areas on the Property, if any, where the existence of munitions and explosives of concern ("MEC") was considered to be present. The term "MEC" means military munitions that may pose unique explosives safety risks, including: (A) unexploded ordnance (UXO), as defined in 10 U.S.C. 2710 (e) (9); (B) discarded military munitions (DMM), as defined in 10 U.S.C. 2710 (e) (2); or (C) explosive munitions constituents (e.g. TNT, RDX) present in high enough concentrations to pose an explosive hazard. Based upon said survey, the Grantor represents that, to the best of its knowledge, no MEC is currently present on the Property. Notwithstanding the survey conducted by the Grantor, the parties acknowledge that given the finding of potential MEC contamination on other parcels at Fort Devens, and due to the former use of the Property as part of an active military installation and training grounds, there is a possibility that MEC may exist on the Property. In the event that the Grantee, its successors and assigns, or any other person should discover any MEC on the Property, it shall not attempt to remove or destroy it, but shall immediately notify the local Police Department and the Grantor, or the Grantor's designated explosive ordnance representative. Personnel will be dispatched promptly to dispose of such ordnance at no expense to the Grantee.

The Grantee shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the provisions of this Section XI, and shall require the inclusion of such provisions of this Section XI in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

XII. NPL PROPERTY

The Grantor acknowledges that Fort Devens has been identified as a NPL site under CERCLA. The Grantee acknowledges that the Grantor has provided it with a copy of the FFA entered into by the EPA, Region I and the Grantor, effective May 13, 1991, and that the Grantor will provide the Grantee with a copy of any amendments thereto. The person or entity to whom the Property is transferred agrees that should any conflict arise between the terms of the FFA as they presently exist or may be amended, and the provision of this Property transfer, the terms of the FFA will take precedence. The person

or entity to whom the Property is transferred further agrees that notwithstanding any other provisions of the Property transfer, the Grantor assumes no liability to the persons or entity to which the Property is transferred should implementation of the FFA interfere with their use of the Property. The person or entity to whom the Property is transferred or any subsequent transferee, shall have no claim on account of any such interference against the Grantor or any officer, agent, employee, or contractor thereof.

The Grantee shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the provisions of this Section XII, and shall require the inclusion of such provisions of this Section XII in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

XIII. USE RESTRICTIONS

The Grantor has undertaken careful environmental study of the Property and concluded, with the Grantee's concurrence, that the highest and best use of the Property is limited, as result of its environmental condition, to commercial and industrial uses (Lease Parcels A2A (AOC9) and A8 (SA13)) or open space and recreation uses (Lease Parcel A4 (AOC40)). In order to protect human health and the environment and further the common environmental objectives and land use plans of the Grantor and Grantee, the covenants and restrictions shall be included to assure the use of the Property is consistent with environmental condition of the Property. These following restrictions and covenants benefit the lands retained by the Grantor and the public welfare generally and are consistent with state and federal environmental statutes.

The Grantee covenants for itself, its successors, and assigns not to use the Property for residential purposes unless evaluated by a Massachusetts Licensed Environmental Professional who shall render an opinion acceptable to the EPA and DEP as to whether the proposed residential use is protective of human health, the environment, safety and public welfare and is consistent with the conclusion that no substantial hazards remain. Any and all requirements set forth by the EPA and DEP to meet the objective of this FOST shall be satisfied before any such activity or use is commenced. The Property

has been remediated in accordance with the ROD. The Grantee, for itself, its successors or assigns covenants that it will not undertake nor allow any activity on or use of the Property that would violate the restrictions contained herein. These restrictions and covenants are binding on the Grantee, its successors and assigns; shall run with the land; and are forever enforceable. Nothing contained herein shall preclude the Grantee from undertaking, in accordance with applicable laws and regulations and without any cost to the Grantor, such additional remediation necessary to allow for residential use of the Property. Upon completion of such remediation required to allow residential use of the Property and upon the Grantee's obtaining the approval of the EPA and DEP and, if required, any other regulatory agency, the Grantor agrees, without cost to the Grantor, to release or, if appropriate, modify this restriction by recordation of an amendment hereto.

The Grantee shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the provisions of this Section XIII, and shall require the inclusion of such provisions of this Section XIII in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

XIV. NON-WAIVER OF CERCLA CLAIMS

Nothing contained in this Deed shall affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by the FFA, CERCLA or other applicable law, rules and regulations, or the Grantor's indemnification obligations under Section 330 of the National Defense Base Authorization Act of 1993, as amended.

XV. NOTICE OF NON-DISCRIMINATION

With respect to activities related to the Property, the Grantee shall not discriminate against any person or persons or exclude them from participation in the Grantee's operations, programs or activities conducted on the Property because of race, color, religion, sex, age, handicap, or national origin.

XVI. INDEMNIFICATION

A. The Grantor recognizes its obligation to hold harmless, defend, and indemnify the Grantee and any successor, assignee, transferee, lender, or lessee of the Grantee or its successors and assigns, as provided in Section 330 of the Department of Defense Authorization Act of 1993, as amended, and to otherwise meet its obligations under law, subject to the availability of appropriated funds.

B. The Grantee shall indemnify and hold the Grantor harmless from all claims, liability, loss, cost, environmental contamination, or damage arising out of or resulting from the activities of the Grantee, its agents, employees, or contractors on the Property prior to the date of this Deed, except where such claims, liability, loss, cost, environmental contamination, or damage is the result of the gross negligence or willful misconduct of the Grantor or its employees, agents, or contractors.

XVII. ANTI-DEFICIENCY ACT

The Grantor's obligation to pay or reimburse any money under this Deed is subject to the availability of appropriated funds to the Department of the Army, and nothing in this Deed shall be interpreted to require obligations or payments by the United States in violation of the Anti-Deficiency Act, 31 U.S.C. Section 1341.

9th day of January, 2006

UNITED STATES OF AMERICA

JOSEPH W. WHITAKER

Deputy Assistant Secretary of the Army
(Installations and Housing)
OASA(I&E)

ACKNOWLEDGEMENT

COMMONWEALTH OF VIRGINIA)
) SS:
COUNTY OF ARLINGTON)

I, the undersigned, a Notary Public in and for the Commonwealth of Virginia, County of Arlington, do hereby certify that this day personally appeared before me in the Commonwealth of Virginia, County of Arlington, Joseph W. Whitaker, Deputy Assistant Secretary of the Army (Installations and Housing), whose name is signed to the foregoing instrument and who acknowledges the foregoing instrument to be his free act and deed on the date shown, and acknowledged the same for and on behalf of the United States of America.

Notary Public

My commission expires: 30 September 2008

ACCEPTANCE: The Massachusetts Development Finance Agency, a Massachusetts body politic and corporate created by Chapter 23G of the Massachusetts General Laws, successor in interest to the Government Land Bank under Chapter 289 of the Acts of 1998, as amended, by its duly qualified and authorized President and CEO, Robert L. Culver, does hereby accept and approve this Quitclaim Deed and agrees to all of the terms and conditions thereof as of the 23rd day of February, 2006.

MASSACHUSETTS DEVELOPMENT
FINANCE AGENCY

By: Robert L. Culver
Name: Robert L. Culver
Title: President and CEO

THE COMMONWEALTH OF MASSACHUSETTS

Suffolk County, ss.

On this 23rd day of February 2006, before me, the undersigned notary public, personally appeared Robert L. Culver, and proved to me through satisfactory evidence of identification, which was ☐ photographic identification with signature issued by a federal or state governmental agency, ☐ oath or affirmation of a credible witness, ☒ personal knowledge of the undersigned, to be the person whose name is signed on the preceding or attached document(s), and acknowledged to me that he signed it voluntarily for its stated purpose, as President and CEO of Massachusetts Development Finance Agency.

(official seal)

Richard W. Holtz Notary Public
My commission
expires:

RICHARD W. HOLTZ
NOTARY PUBLIC

My Commission Expires on Sept. 7, 2012

This deed was prepared/reviewed by
Julie D'Esposito, Attorney
U.S. Army Corps of Engineers, New England District

EXHIBIT A
LEGAL DESCRIPTION OF A2A, A4 AND A8

PARCEL A2A

A certain Parcel of Land located in the town of Shirley, Middlesex County, MA, known as Parcel A2A. Beginning at a point with the NAD coordinates ($\pm 50'$) N3030060, E624820.

- Thence N11°-00'W, one hundred forty eight feet \pm (148 \pm) to a point;
- Thence N07°-30'E, six hundred twenty feet \pm (620 \pm) to a point;
- Thence N00°-20'E, six hundred eighty feet \pm (680 \pm) to a point;
- Thence N41°-00'E, three hundred forty feet \pm (340 \pm) to a point;
- Thence S26°-00'E, five hundred seventy three feet \pm (573 \pm) to a point;
- Thence S56°-00'E, two hundred eighty three feet \pm (283 \pm) to a point;
- Thence S21°-00'E, five hundred forty four feet \pm (544 \pm) to a point;
- Thence N84°-05'-04"W, three hundred nine and forty two one hundredths feet (309.42') to a point;
- Thence S52°-10'-12"W, two hundred fifty and five one hundredths feet (250.05') to a point;
- Thence S51°-55'-00"W, four hundred fourteen and ninety one hundredths feet (414.9') to a point;
- Thence S43°-20'-55"W, one hundred ninety three and thirty four one hundredths feet (193.34') to the point of beginning.

Said Parcel Contains 18.5 \pm acres.

PARCEL A4

A certain parcel of land located in the Town of Harvard, Worcester County, MA, known as lease parcel A4, bordering Patton Road on two sides, beginning at a point with the NAD coordinates ($\pm 50'$) N3018460, E629390.

- Thence along the north side of Patton Road, west eleven hundred and ninety one feet \pm , (1191' \pm) to a point;
- Thence N37° 39'W, two hundred and fifty six feet \pm , (256' \pm) to a point;
- Thence N16° 30'E, one hundred and sixty three feet \pm , (163' \pm) to a point;
- Thence N60° 25'E, two hundred and forty six feet \pm , (246' \pm) to a point;
- Thence N69° 30'E, eight hundred and ninety five feet \pm , (895' \pm) to a point;
- Thence S70° 10'E, two hundred and forty one feet \pm , (241' \pm) to a point on the west sideline of Patton Road;
- Thence along Patton Road southerly five hundred and fourteen feet \pm , (514' \pm) to the point of beginning;

Said parcel contains 16 \pm acres.

PARCEL A8

A certain parcel of land located in the Town of Harvard, Worcester County, MA, known as lease parcel A8, beginning on the westerly sideline of Lake George Street, at a point with NAD coordinates ($\pm 50'$) N3019300, E620800.

- Thence south along the west side of Lake George Street one thousand one hundred and fifty three feet \pm , (1153' \pm) to a point;
- Thence S25° 30'E, one hundred and eighty six feet \pm , (186' \pm) to a point;
- Thence N46° 35'W, eight hundred and forty two feet \pm , (842' \pm) to a point;
- Thence N23° 30'W, one hundred and sixty nine feet \pm , (169' \pm) to a point;
- Thence N07° 55'W, four hundred and ninety feet \pm , (490' \pm) to a point;
- Thence N87° 15'E, one hundred and thirty five feet \pm , (135' \pm) to a point;
- Thence N33° 45'E, seventy three feet \pm , (73' \pm) to a point;
- Thence N88° 45'E, three hundred and twenty three feet \pm , (323' \pm) to the point of beginning;

Said parcel contains 9.7 acre \pm .

Exhibit B
Quitclaim Deed
Parcels A2A, A4 & A8

FINAL

FINDING OF SUITABILITY TO TRANSFER

**LEASE PARCELS
A2A (AOC 9), A4 (AOC 40) AND A8 (SA 13)
FORT DEVENS, MASSACHUSETTS**

FEBRUARY 2005

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FINDING OF SUITABILITY TO TRANSFER FORT DEVENS, MASSACHUSETTS

Lease Parcels A2A, A4, and A8

1.0 PURPOSE

The purpose of this Finding of Suitability to Transfer ("FOST") is to document the environmental suitability of certain parcels of property at the former Fort Devens, Devens, Massachusetts ("Devens") for transfer to the Massachusetts Development Finance Agency for development as commercial/industrial property (Lease Parcels A2a (AOC9) and A8 (SA13)) or open space/recreation property (Lease Parcel A4 (AOC40)) consistent with Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") Section 120(h) and Department of Defense Policy. In addition, the FOST identifies use restrictions as specified in the attached Environmental Protection Provisions necessary to protect human health or the environment after such transfer.

2.0 PROPERTY DESCRIPTION AND HISTORY

Property Description. The proposed property to be transferred, Lease Parcels A2A, A4, and A8 (the "Property"), consists of a total of 44.2 (±) acres of the former Devens Main and North Posts: A2A is 18.5 acres; A4 is 16.0 acres; and, A8 is 9.7 acres respectively. Site Location Maps and survey boundary descriptions are provided as Enclosure 1. Lease Parcel A2A, referred to as the North Post Landfill, is located south and west of the Devens Wastewater Treatment Plant Filter Beds and was designated Area of Contamination (AOC) 9 in the 1996 Environmental Baseline Survey (EBS) for Fort Devens. Lease Parcel A4 is located along the edge of Patton Road in the southeastern section of the Main Post. A section of Lease Parcel A4 has been named the Cold Spring Brook Landfill after approximately four (4) acres was used as a debris fill area and designated AOC 40 within the Devens EBS. Lease Parcel A8 is referred to as the Lake George Street Landfill and is located west of Lake George Street near the Nashua River. The fill area was designated Study Area (SA) 13.

History. Lease Parcel A2A (North Post Landfill) was formerly operated as a demolition debris and solid waste fill area that operated from the late 1950's until 1978. Operations at the North Post Landfill are reported to have included the disposal of construction demolition debris, tires, concrete, asphalt, scrap metal, bricks, wood, automobiles and auto parts, tree stumps, and other debris. The North Post Landfill was designated AOC 9 due to the potential for contamination on the site as a result of past operations as a landfill. Lease Parcel A4 was formerly operated as demolition debris and solid waste fill area beginning in the mid to late 1960's and extended approximately 800-feet along Patton Road adjacent to Cold Spring Brook Pond. The site was designated AOC 40 following the discovery of fourteen empty 55-gallon drums, potentially containing chlorinated solvents and metal contaminants, along the edge of Cold Spring Brook Pond in November 1987. Other wastes located at AOC 40 included concrete slabs, wire, storage tanks, rebar, timber, and miscellaneous debris. Lease Parcel A8 (SA 13) was formerly operated as a solid waste landfill area and was known as the Lake George Street Landfill.

According to historical records, no buildings or other structures existed on A2A and A4, but a building did exist in the area of Lease Parcel A8 circa 1965 to 1972. The building was demolished, and the Lake George Street Landfill Lease Parcel A8 was used as construction debris and stump landfill operating between late 1965 and 1990. (See Sites Close out Report). The remedial alternative specified in the Record of Decision (ROD) called for full excavation of A2a (AOC 9), A4 (AOC 40), and A8 (SA 13). The excavated areas were then backfilled to restore the site to a natural or desired condition.

All of the waste debris described above was removed and properly disposed of off-site or in the consolidated landfill under the ROD.

3.0 ENVIRONMENTAL CONDITION OF PROPERTY

A determination of the environmental condition of the facilities has been made based on environmental assessment, investigative reports, and remedial actions including but not limited to:

- Final Environmental Baseline Survey for Fort Devens, 1996 ("EBS");
- Final Site Investigation Report, Main Post Site Investigation, December, 1994;
- Final Remediation Investigation Report for Areas of Contamination ("AOCs") 4, 5, 18, 40; Fort Devens, Massachusetts, April 1993;
- Final Record of Decision, for Landfill Remediation Areas of Contamination 9, 11, 40 & 41 and Study Areas 6, 12, and 13, Devens Reserve Forces Training Area, Devens Massachusetts, July 6, 1999;
- Consolidated Landfill Closure Certification Reports, September 30, 2003;
- and
- Removal Action Report, Ordnance, Ammunition & Explosive Removal Action, Devens RFTA, 10 Oct 1996 ("MEC Report")

The Property information provided for the three lease parcels is a result of a complete search of Department of Defense ("DOD") files by the Army during the development of this FOST. A complete list of documents that provide information on environmental conditions of the Property is attached (Enclosure 2).

3.1 ENVIRONMENTAL CONDITION OF PROPERTY CATEGORIES

The complete list of the DOD Environmental Condition of Property ("ECP") Categories for the property proposed for transfer is located in Table 1 - Description of Property (Enclosure 3). The EPC Category for the Properties have been changed from "Leasable" to ECP Category -4, since all remedial actions necessary to protect human health and the environment have been completed and a Closure Certification issued by EPA on September 30, 2003. See Table 1 at Enclosure 3.

3.2 STORAGE, RELEASE, OR DISPOSAL OF HAZARDOUS SUBSTANCES

The potential for a release or the disposal of hazardous substances in excess of the reportable quantities listed in 40 CFR 373 has been investigated by DOD at the Property. Parcel A2A (AOC 9) was characterized during a Site Investigation (SI) in 1996; Parcel

A4 (AOC 40) was characterized during a Remedial Investigation (RI) in 1993; and Parcel A8 (SA 13) was characterized during a separate SI in 1995. The results of these investigations and corresponding Preliminary Risk Evaluations (PREs) prepared by DOD are summarized within the July 1999, ROD for Landfill Remediation, AOC 9, 11, 40 & 41 and Study Areas 6, 12, and 13, Devens Reserve Training Area. This investigation included evaluation of the fourteen empty 55-gallon drums, likely containing chlorinated solvents and metal contaminants. These drums were discovered along the edge of Cold Spring Brook Pond in November 1987 and were removed from the site. Each lease parcel fill area was recommended for removal under the terms of the ROD with no further remedial action required following the removal and consolidation of the excavated fill materials (Parcels A2A, A4, and A8), impacted soils (Parcels A2A, A4, and A8), and sediments (Parcel A4) within the Fort Devens Consolidated Landfill. Based on the results of these investigations, a notification of hazardous substance storage, release, or disposal is provided in Tables 2d (Parcel A2A), 2e (Parcel A4), and 2f (Parcel A8) at Enclosure 4.

3.2.1 Solid Waste Management Units (SWMUs)

There are no Solid Waste Management Units (SWMUs) as defined under Massachusetts Solid Waste Regulations located within the boundaries of the Property. Therefore, a notification of SWMUs is not required.

3.2.2 Soil, Groundwater and Surface Water Contamination

Soil. All soil contamination was remediated to an acceptable level based on the comparison of confirmatory sample results to the USEPA Region 9 Preliminary Remediation Goals (PRGs) for residential soils and the Massachusetts Contingency Plan (MCP) Method 1: Soil Category S-2 Standards applicable to the planned land uses and disposed of in accordance with the ROD.

Lease Parcel A2A was determined to have limited amounts of organic polynuclear aromatic hydrocarbons and beryllium metal present in subsurface soils at concentrations exceeding USEPA Region III human health guidelines for commercial industrial land use. The landfill contents and affected soils were excavated and consolidated with landfill materials from Lease Parcels A4 and A8 into the Devens Consolidated Landfill or disposed of off site (ROD 1999).

Lease Parcel A4 investigations concluded that soil and sediment contamination included SVOCs, pesticides, and inorganic compounds at the Cold Spring Brook Landfill. Following the ROD and Preliminary Risk Evaluations (PRE), soils and sediments from Parcel A4 were approved for consolidation with excavated materials from Lease Parcels A2A and A8 and disposed of in the Consolidated Landfill or off site in accordance with the ROD.

Lease Parcel A8 investigations concluded that landfill activities did not contribute to soil or groundwater contamination at the Lake George Street Landfill. The landfill contents from Lease Parcel A8 were later consolidated with fill materials from Lease Parcels A2A and A4 into the Consolidated Landfill. Based on the pre-assessment during development of the ROD, the fill and limited sediment areas were approved for removal and consolidation into the Consolidated Landfill.

The contents of each of three former landfills are now secured within the Consolidated Landfill, recycled or disposed of off site. The closure certification for the Consolidated Landfill was issued on September 30, 2003.

Ground Water and Surface Water. Groundwater contamination was detected at various locations at Fort Devens as indicated by the SI and RI. Groundwater and surface water were investigated at the Property during the series of investigations.

Groundwater and surface water were characterized at Parcel A2A and surrounding area during two rounds of testing during the SI. Surface water samples contained inorganic constituents similar to water quality characteristics in the area of the Nashua River located adjacent to Parcel A2A. Groundwater analysis detected two types of organic compounds, volatile organic compounds and semi-volatile organic compounds, and inorganic contaminants in unfiltered samples during the first round of sampling. Total Petroleum Hydrocarbon Compounds analysis constituents were also detected during both round 1 and 2 sampling events. Inorganics were not detected above their respective US EPA drinking water standard or guideline after the groundwater samples were filtered during the second round of testing. However, even with the presence of these constituents, groundwater was determined not to be impacted.

The groundwater and surface water were determined not to be impacted such that no additional remediation was required at Lease Parcel A4.

Groundwater and surface water were characterized at Lease Parcel A8 during the implementation of a SI. Surface water was not found to directly discharge to the Nashua River and groundwater was not impacted from former filling operations.

3.3 PETROLEUM AND PETROLEUM PRODUCTS

Petroleum and petroleum products have been assessed at the Property in two categories: not in underground or above-ground storage tanks (Section 3.3.1, Storage, Release, or Disposal of Petroleum Products) and, within underground and above ground storage tanks (Section 3.3.2, Underground and Above Ground Storage Tanks). The results of the petroleum and petroleum product assessment are as follows:

3.3.1 Storage, Release, or Disposal of Petroleum Products

Residual quantities of petroleum or petroleum products were disposed at the sites during historical operations as indicated by the EBS and SI/RI. Each of the sites was used for filling operations of debris materials. Significant environmental media investigations have been conducted at each site in order to establish if any such release or disposal conditions exist. Based on the results of these investigations, a notification of petroleum product storage, release, or disposal is provided in Tables 2a (Parcel A2A), 2b (Parcel A4), and 2c (Parcel A8) at Enclosure 4. As discussed in 3.2.2 above, contaminated soil was excavated and consolidated into the Devens Consolidated Landfill or disposed of off site in accordance with the ROD.

3.3.2 Underground and Above Ground Storage Tanks (UST/AST)

There is no evidence that petroleum or petroleum products were stored in underground or above ground storage tanks on or at the Property. Accordingly, a notification of petroleum or petroleum product storage, release or disposal in underground or above ground storage tanks is not required for the Property.

3.4 POLYCHLORINATED BIPHENYLS (PCBs)

There were no known PCB-containing transformers, equipment, or devices on Lease Parcels the Property. In addition, no PCB containing equipment or associated debris was reported identified during consolidation activities that were performed under regulatory oversight. Accordingly, a notification for PCBs for the Property is not required.

3.5 ASBESTOS

A former Fort Devens Aerial photograph taken in April 1965 shows a building on Lease Parcel A8 however another similar aerial photograph taken in 1972 does not show the building or any other building on any of these parcels. Therefore, it is presumed by DOD that the building must have been demolished. Since there are no buildings or structures with asbestos containing material (ACM) currently located on the Property, and all the contaminated soil from these parcels were excavated and taken to the Consolidated landfill and backfilled with clean soil hence leaving no ACM on these parcels, the deed will not include an asbestos warning or covenant in the Environmental Protection Provisions.

3.6 LEAD BASED PAINT ("LBP")

As described in paragraph 3.5, there was a building on Lease Parcel A8 that was demolished. Based on the age of the building (constructed prior to 1978), the building is presumed to have contained lead-based paint, but the soil was excavated after the area was used as a construction debris landfill. Since there are no buildings or structures with LBP currently located on the Property, the deed will not include a LBP warning or covenant in the Environmental Protection Provisions.

3.7 RADIOLOGICAL MATERIALS

Based on the EBS dated April 1996, there is no evidence that radioactive material or sources were used or stored on the property.

3.8 RADON

A radon survey was conducted at former Fort Devens during a North Post residential housing survey in 1995. A radon survey is not known to have been conducted at the Property. Radon was detected at or above the EPA residual action level of 4 picocuries per liter (pCi/L) in some buildings that were sampled during the North Post survey. Therefore, the deed will include the radon notification provisions provided in the Environmental Protection Provisions (Enclosure 5).

3.9 MUNITIONS AND EXPLOSIVES OF CONCERN ("MEC")

Based on a review of the MEC Reports by the Army, the Property is not known to contain MEC. However, some MEC was found on parcel A2A and properly disposed as indicated by Removal Action Report, 1996. Therefore, an MEC notification is included in the Environmental Protection Provisions (Enclosure 5).

4.0 REMEDIATION

A Federal Facility Agreement dated May 13, 1991 and amended March 4, 1996, applies to the Property. All remediation activities on the Property required by such agreement are completed or in place and operating properly and successfully. The deed will include a provision reserving the Army's right to conduct remediation activities in the Environmental Protection Provisions, (Enclosure 5), as necessary.

5.0 REGULATORY/PUBLIC COORDINATION

US Environmental Protection Agency (EPA) and Massachusetts Department of Environment Protection (MDEP) acted as Regulatory agencies (Regulators) for this FOST review. This FOST was coordinated with Public and the Regulators for their comments. Public Notification and Regulatory comments and applicable response to these comments are presented at Enclosure 6. No Public comments were received during the Public coordination period.

6.0 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE AND CONSISTENCY WITH LOCAL REUSE PLAN

The environmental impacts associated with the proposed transfer of the Property have been analyzed in accordance with the National Environmental Policy Act (NEPA) and Devens Reuse Plan. The result of this analysis has been documented in the 1995 Final Environmental Impact Statement, Fort Devens, Massachusetts, Disposal and Reuse. Any encumbrances or conditions identified in such analysis as necessary to protect human health or the environment have been incorporated into the FOST. In addition, the proposed transfer is consistent with the intended reuse of the Property as set forth in the Devens Reuse Plan.

7.0 ENVIRONMENTAL PROTECTION PROVISIONS

On the basis of the above results from the EBS and other environmental studies (SI/RI) and in consideration of the intended use of the property, certain terms and conditions are required for the proposed transfer. These terms and conditions are set forth in the attached Environmental Protection Provisions and will be included in the deed (Enclosure 5).

8.0 FINDING OF SUITABILITY TO TRANSFER

Based on the above information, I conclude that Department of Defense requirement to reach a finding of suitability to transfer the Property have been met, subject to the terms and conditions set forth in the attached Environmental Protection Provisions (Enclosure 5). All removal or remedial actions necessary to protect human health and the environment have been taken and the property is transferable under CERCLA section 120(h) (3). In addition to the Environmental Protection Provisions, the deed for this transaction will also contain:

- The covenant under CERCLA §120 (h)(3)(A)(ii)(I) warranting that all remedial action under CERCLA necessary to protect human health and the environment with respect to hazardous substances remaining on the Property has been taken before the date of transfer.
- The covenant under CERCLA §120 (h)(3)(A)(ii)(II) warranting that any remedial action under CERCLA found to be necessary after the date of transfer with respect to such hazardous substances remaining on the Property shall be conducted by the United States.
- The clause as required by CERCLA §120 (h)(3)(A)(iii) granting the United States access to the Property in any case in which remedial action or corrective action is found to be necessary after the date of transfer.

As required under CERCLA Section 120(h) and DOD FOST Guidance, notification of petroleum product activities shall be provided in the deed. See Tables 2a, 2b, and 2c. Notification of Petroleum Product Storage, Release, or Disposal, Lease Parcels A2A (AOC9), A4 (AOC40), and A8 (SA13) (Enclosure 4, Tables 2a, 2b and 2c). Notification of Hazardous Substance Storage, Release, or Disposal (Enclosure 4 Tables 2d, 2e and 2f).

 15 Feb 05

Glynn D. Ryan
Chief, Atlanta Field Office
Department of the Army
Base Realignment and Closure

Enclosures:

1. Site Location Maps, Site Plans & Survey Boundary Descriptions
2. References
3. Table 1, Environmental Condition of Property (ECP) Categories
4. Table 2a, 2b, 2c Notification of Petroleum Products Storage, Release, or Disposal and Table 2d, 2e, 2f Notification of Hazardous Substance Storage, Release, or Disposal
5. Environmental Protection Provisions
6. Regulatory/Public Comments

ENCLOSURE 1

**FINDING OF SUITABILITY TO TRANSFER
LEASE PARCELS A2A, A8, AND A4
FORT DEVENS, MASSACHUSETTS**

SITE LOCATION MAPS AND SURVEY BOUNDARY DESCRIPTIONS








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Location of Transfer Parcels A.2a, A.4 & A.8

Legend

-  Transfer Parcels
-  Water
-  Building
-  Devens Boundary
-  Road



Ayer

Shirley

Harvard

Survey Boundary Descriptions

PARCEL #A8

A certain parcel of land located in the Town of Harvard, Worcester County, MA, known as lease parcel A8, beginning on the westerly sideline of Lake George Street, at a point with NAD coordinates (= 50') N3019300, E620800.

- Thence south along the west side of Lake George Street one thousand one hundred and fifty three feet =, (1153' =) to a point;
- Thence S25° 30'E, one hundred and eighty six feet =, (186' =) to a point;
- Thence N46° 35'W, eight hundred and forty two feet =, (842' =) to a point;
- Thence N23° 30'W, one hundred and sixty nine feet =, (169' =) to a point;
- Thence N07° 55'W, four hundred and ninety feet =, (490' =) to a point;
- Thence N87° 15'E, one hundred and thirty five feet =, (135' =) to a point;
- Thence N33° 45'E, seventy three feet =, (73' =) to a point;
- Thence N88° 45'E, three hundred and twenty three feet =, (323' =) to the point of beginning;

Said parcel contains 9.7 acres =.

PARCEL # A4

A certain parcel of land located in the Town of Harvard, Worcester County, MA, known as lease parcel A4, bordering Patton Road on two sides, beginning at a point with the NAD coordinates (= 50') N3018460, E629390.

- Thence along the north side of Patton Road, west eleven hundred and ninety one feet =, (1191' =) to a point;
Thence N37° 39'W, two hundred and fifty six feet =, (256' =) to a point;
- Thence N16° 30'E, one hundred and sixty three feet =, (163' =) to a point;
- Thence N60° 25'E, two hundred and forty six feet =, (246' =) to a point;
- Thence N69° 30'E, eight hundred and ninety five feet =, (895' =) to a point;
- Thence S70° 10'E, two hundred and forty one feet =, (241' =) to a point on the west sideline of Patton Road;
- Thence along Patton Road southerly five hundred and fourteen feet =, (514' =) to the point of beginning;

Said parcel contains 16 acres =.

PARCEL A2A

A certain Parcel of Land located in the town of Sbirley, Middlesex County, MA, known as Parcel A2A. Beginning at a point with the NAD coordinates (50'=) N3030060, E624820.

Thence N11°-00'W, one hundred forty eight feet= (148=) to a point;

- Thence N07°-30'E, six hundred twenty feet = (620=) to a point;
- Thence N00°-20'E, six hundred eighty feet = (680=) to a point;
- Thence N41°-00'E, three hundred forty feet = (340=) to a point;
- Thence S26°-00'E, five hundred seventy three feet = (573=) to a point;
- Thence S56°-00'E, two hundred eighty three feet = (283=) to a point;
- Thence S21°-00'E, five hundred forty four feet = (544') to a point;
- Thence N84°-05'-04"W, three hundred nine and forty two one hundredths feet (309.42') to a point;
- Thence S52°-10'-12"W, two hundred fifty and five one hundredths feet (250.05') to a point;
- Thence S51°-55'-00"W, four hundred fourteen and ninety one hundredths feet (414.9') to a point;
- Thence S43° 20'-55"W, one hundred ninety three and thirty four one hundredths feet (193.34') to the point of beginning.

Said Parcel Contains 18.5= acres.

ENCLOSURE 2

FINDING OF SUITABILITY TO TRANSFER LEASE PARCEL A2A, A8, AND A4 FORT DEVENS, MASSACHUSETTS

REFERENCES

1. Arthur D. Little, Inc. (ADL), 1996, "Environmental Baseline Survey, for Proposed Lease and/or Transfer, Fort, Devens-Base wide, April.
2. Ecology and Environmental, Inc., 1993. "Final Remedial Investigation Report for Areas of Contamination (AOC) 4, 5, 18, 40, Fort Devens, Massachusetts"; Prepared for the US Army Toxic and Hazardous Material Agency, Aberdeen Proving Ground, Maryland.
3. Harding Lawson Associates, 1999. "Final Record of Decision (ROD), Landfill Remediation Study Areas 6, 12, and 13 and Areas of Contamination (AOC) 9, 11, 40, and 41"; Prepared for US Corps of Engineers, New England District, July.
4. Harding Lawson Associates, 1998. "Landfill Remediation Feasibility Study Addendum Report", November.
5. Vanasse Hanger Brustlin, Inc (VHB) 1994. "Fort Devens Reuse Plan." Prepared for the Joint Boards of Selectmen (Town of Ayer, Harvard, Lancaster, and Shirley) and the Massachusetts Government Land Bank; July.
6. ABB Environmental Services, Inc., 1994. "Supplemental Site Investigations Data Packages - Groups 2 & 7, Fort Devens, Massachusetts"; Data Item 9; Prepared for the US Army Environmental Center; January.
7. Arthur D. Little, Inc. (ADL), 1995. "Final Maintenance and Waste Accumulation Area (AREE 61) Report"; prepared for U.S. Army Environmental Center; October.
8. Arthur D. Little, Inc. (ADL), 1995. "Final Transformer Study (AREE 66) Report"; prepared for U.S. Army Environmental Center; September.
9. Arthur D. Little, Inc. (ADL), 1995. "Asbestos Survey (AREE 65) Report"; prepared for U.S. Army Environmental Center; October.
10. Arthur D. Little, Inc. (ADL), 1995. "Lead-Based Paint Survey (AREE 68) Report"; prepared for U.S. Army Environmental Center; October.
11. Arthur D. Little, Inc. (ADL), 1995. "Radon Survey (AREE 67) Report"; prepared for U.S. Army Environmental Center; October.
12. U.S. Department of the Army, Corps of Engineers, New England Division, 1995. "Final Environmental Impact Statement, Fort Devens, Massachusetts, Disposal

and Reuse." Prepared for U.S. Department of Army, Headquarters, Forces Command, Fort McPherson, Ga.; May.

13. U.S. Environmental Protection Agency (USEPA), 1991. "In the Matter of: The U.S. Department of the Army, Fort Devens Army Installation, Fort Devens, MA; Federal Facility Agreement Under CERCLA Section 120"; May. ; amended March 4, 1996
14. Stone & Webster, Inc., 2003. "Remedial Action Closure Report, Landfill Remediation & Restoration Sites (AOCs 9, 11, 40, 41, & SAs 12 & 13)"; Prepared for the U.S. Department of the Army, Corps of Engineers, New England Division, September.
15. Stone & Webster, Inc., 2003. "Remedial Action Closure Report Consolidation Landfill"; Prepared for the U.S. Department of the Army, Corps of Engineers, New England Division, September.
16. Human Factors Applications, 1996. "Removal Action Report, Vol. I, Ordinance, Ammunition, & Explosives Removal Action, Prepared for the U.S. Department of the Army, Corps of Engineers, Engineering and Support Center, Huntsville, October.

ENCLOSURE 3

FINDING OF SUITABILITY TO TRANSFER LEASE PARCELS A2A, A4, & A8 FORT DEVENS, MASSACHUSETTS

TABLE 1
PROPERTY DESCRIPTIONS and ECP CATEGORIES

Property Descriptions And ECP Categories						
EBS Parcels	Area/Name	Associated Buildings/Facilities	Size (In Acres)	Original ECP Category & Designation	Reason For Changing ECP Category	Revised ECP Category
Lease Parcel A2A	North Post Landfill (AOC 9)	None	18.5	Leasable	Protection of human health and the environment have been achieved by the removal of on-site debris in 2001 and confirmation of site conditions during a Site Investigation in 1996. All remedial actions necessary to protect human health and the environment have been completed. A certificate of closure has been issued by EPA on 30 Sep 2003.	4
Lease Parcel A4	Cold Spring Brook Land fill AOC 40	None	16.0	Leasable	Protection of human health and the environment have been achieved by the removal and disposal off site of soils with constituent concentrations above standards set in the 1999 ROD identified during the 1993 Remedial Investigation. All remedial actions necessary to protect human health and the environment have been completed. A certificate of closure has been issued by EPA on 30 Sep 2003.	4
A8	Lake George Street Landfill (SA 13)	None	9.7	Leasable	Protection of human health and the environment have been achieved by the removal of on-site debris and confirmation of site conditions during a Site Investigation in 1995. All remedial actions necessary to protect human health and the environment have been completed. A certificate of closure has been issued by EPA on 30 Sep 2003.	4
Notes: 1 - ECP Category Descriptions: Category 1. - areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas). However, the area may have been used to store hazardous substances or petroleum products; Category 2. - areas where only a release or disposal of petroleum products and/or their derivatives has occurred (including migration of petroleum products from adjacent areas); Category 3. - areas where a release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action; Category 4. - areas where a release, disposal, and/or migration of hazardous substances has occurred, and all remedial actions necessary to protect human health and the environment have been taken; Category 5. - areas where a release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are underway but all required remedial actions have not yet taken place; Category 6. - areas where a release, disposal, and/or migration of hazardous substances has occurred, but required actions have not yet been implemented; Category 7. - areas that are not evaluated or require additional evaluation						

ENCLOSURE 4

**FINDING OF SUITABILITY TO TRANSFER
LEASE PARCELS A2A, A4, & A8
FORT DEVENS, MASSACHUSETTS**

**NOTIFICATION of PETROLEUM PRODUCTS, STORAGE, RELEASE, OR
DISPOSAL**

TABLES 2a, 2b AND 2c



Table 2a-2f.doc

AND

**NOTIFICATION OF HAZARDOUS SUBSTANCE STORAGE, RELEASE, OR
DISPOSAL**

TABLES 2d, 2e AND 2f



Table 2a-2f.doc

TABLE 2a

NOTIFICATION of PETROLEUM PRODUCTS, STORAGE, RELEASE, OR DISPOSAL

Finding of Suitability To Transfer

Devens, MA

Lease Parcel A2A (AOC9), North Post Landfill

Site	Hazardous Substance Environmental Concern	Disposal Storage Release	Quantity	Dates	CASRN No.	RCRA Waste No.	Site Status Apply to entire site
AOC 9	1. Waste oil, 5-gallon cans 2. Poly-Aromatic Hydrocarbons	Disposal Media affected: Soil, GW	1. Unknown 2. 15,500 Soil 3. >MCP 4. GW-1 Standards	1950 to 1970 Observed	Unknown	Unclassified	FS Complete 1995 ROD Signed 7/1999 Wood, concrete, tires, steel, gravel recycled 88,870 cy placed & compacted into consolidated landfill 5/2002 to 9/2002

Notes: CASRN=Chemical Abstracts Registration Number ROD=Record of Decision Document FS=Feasibility Study

TABLE 2b

**NOTIFICATION of PETROLEUM PRODUCTS, STORAGE, RELEASE, OR DISPOSAL
Finding of Suitability To Transfer
Devens, MA
Lease Parcel A4, Cold Spring Brook Landfill**

Site	Hazardous Substance Environmental Concern	Disposal Storage Release	Quantity	Dates apply to all substances	CASRN No.	RCRA Waste No.	Site Status apply to entire site
AOC40	1. Semi-Volatile Organic Compounds	Disposal Media affected: Soil, Sediment, and GW	1. Unknown 2. 15,500 Soil 3. >MCP 4. GW-1 Standards	1965 to 1980	Unknown	Unclassified	RI 1993 FS Complete 1995 ROD Signed 7/1999 Removal and Disposal into Consolidated Landfill 2002

Notes: CASRN=Chemical Abstracts Registration Number ROD=Record of Decision Document FS=Feasibility Study

TABLE 2c

NOTIFICATION of PETROLEUM PRODUCTS, STORAGE, RELEASE, OR DISPOSAL

Finding of Suitability To Transfer

Devens, MA

Lease Parcel A8 (SA 13), Lake George Street Landfill

Site	Hazardous Substance Environmental Concern	Disposal Storage Release	Quantity	Dates apply to all substances	CASRN No.	RCRA Waste No.	Site Status apply to entire site
SA 13	1. Waste oil, 5-gallon cans	Disposal Media affected: Soil	1. Unknown 2. 15,500 Soil 3. >MCP 4. GW-1 Standards	1965 to 1975	Unknown	N/A	SI 9/1993 SSI 9/1994 ROD Signed 7/1999 Wood, concrete & steel recycled 7,749 cy placed & compacted into consolidated landfill 5/2002 to 9/2002

Notes: CASRN=Chemical Abstracts Registration Number
SSI=Supplemental Site Investigation

ROD=Record of Decision Document

SI=Site Investigation

TABLE 2d
NOTIFICATION of HAZARDOUS SUBSTANCE, STORAGE, RELEASE, OR DISPOSAL
Finding of Suitability To Transfer
Devens, MA
Lease Parcel A2A (AOC9), North Post Landfill

Site	Hazardous Substance Environmental Concern	Disposal Storage Release	Quantity	Dates	CASRN No.	RCRA Waste No.	Site Status Apply to entire site
AOC 9	1. Beryllium 2. Lead	Disposal Media affected: Soil, GW Soil, GW	1. Unknown 2. 15,500 Soil 3. >MCP 4. GW-1 Standards	1950 to 1970 Observed	Unknown	Unclassified	FS Complete 1995 ROD Signed 7/1999 88,870 cy placed & compacted into consolidated landfill 5/2002 to 9/2002 RCRA Lead Soils Disposed Offsite in RCRA Facility

Notes: CASERN=Chemical Abstracts Registration Number ROD=Record of Decision Document FS=Feasibility Study

TABLE 2c
NOTIFICATION of HAZARDOUS SUBSTANCE, STORAGE, RELEASE, OR DISPOSAL
Finding of Suitability To Transfer
Devens, MA

Lease Parcel A4 (AOC40), Cold Spring Brook Landfill

Site	Hazardous Substance Environmental Concern	Disposal Storage Release	Quantity	Dates apply to all substances	CASRN No.	RCRA Waste No.	Site Status apply to entire site
AOC40	1. 55 gal drums of residual antifreeze 2. bromoform 3. 1,2-dichloroethane 4. 1,1,2,2-tetrachlorethane 5. selenium 6. silver 7. arsenic 8. SVOC's 9. pesticides 10. inorganic compounds 11. explosives 12. aluminum 13. iron 14. manganese 15. sodium 16. mercury 17. zinc 18. dichlorophenol-dichlorothylene (DDE)	Disposal Media affected: Soil, Sediment, and GW	1. Unknown 2. 15,500 Soil 3. >MCP 4. GW-1 Standards	1965 to 1980	1. 1.Unknown 2. 75252 3. 107062 4. 70345 5. 778292 6. 7440224 7. unknown 8. " 9. " 10. " 11. " 12. N/A 13. " 14. " 15. " 16. 7440235 17. 7439976 18. 7440666	1. Unknown 2. U225 3. U077 4. U029 5. Unknown 6. " 7. " 8. " 9. " 10. " 11. " 12. N/A 13. " 14. " 15. " 16. Unknown 17. " 18. N/A	RI 1993 FS Complete 1995 ROD Signed 7/1999 Removal and Disposal into Consolidated Landfill 2002

Notes: CASERN=Chemical Abstracts Registration Number ROD=Record of Decision Document FS=Feasibility Study

TABLE 2f
NOTIFICATION of HAZARDOUS SUBSTANCE, STORAGE, RELEASE, OR DISPOSAL
Finding of Suitability To Transfer
Devens, MA
Lease Parcel A8 (SA 13), Lake George Street Landfill

Site	Hazardous Substance Environmental Concern	Disposal Storage Release	Quantity	Dates	CASRN No.	RCRA Waste No.	Site Status apply to entire site
SA13	Construction demolition debris, tree trunks & stumps, metal objects, and miscellaneous debris	Disposed Media affected: Soil	1. Unknown 2. 15,500 Soil 3. >MCP 4. GW-1 Standards	1965 to 1975	Unknown	N/A	SI 9/1993 SSI 9/1994 ROD Signed 7/1999 Wood, concrete & steel recycled 7,749 cy placed & compacted into consolidated landfill 5/2002 to 9/2002

Notes: CASRN=Chemical Abstracts Registration Number ROD=Record of Decision Document SI=Site Investigation

ENCLOSURE 5

FINDING OF SUITABILITY TO TRANSFER LEASE PARCEL A2A, A8, AND A4 FORT DEVENS, MASSACHUSETTS

ENVIRONMENTAL PROTECTION PROVISIONS

The following conditions, restrictions, and notifications will be placed in the deeds to ensure protection of human health and the environment and to preclude any interference with ongoing or completed remediation activities at the former Fort Devens.

Inclusion of Provisions

The person or entity to whom the property is transferred shall neither transfer the property, lease the property, nor grant any interest, privilege, or license whatsoever in connection with the property without the inclusion of the environmental protection provisions contained herein, and shall require the inclusion of such environmental protection provisions in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

NPL Property

The United States acknowledges that Fort Devens has been identified as a National Priority list ("NPL") site under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended. The Transferee acknowledges that the United States has provided it with a copy of the Fort Devens Federal Facility Agreement ("FFA") entered into by the United States Environmental Protection Agency ("EPA"), Region I and the Department of the Army, effective May 13, 1991, and will provide the Transferee with a copy of any amendments thereto. The person or entity to whom the property is transferred agrees that should any conflict arise between the terms of the FFA as they presently exist or may be amended, and the provision of this property transfer, the terms of the FFA will take precedence. The person or entity to whom the property is transferred further agrees that notwithstanding any other provisions of the property transfer, the United States assumes no liability to the persons or entity to which the property is transferred should implementation of the FFA interfere with their use of the property. The person or entity to whom the property is transferred or any subsequent transferee, shall have no claim on account of any such interference against the United States or any officer, agent, employee, or contractor thereof.

CERCLA Access Clause

In accordance with Federal Facilities Agreement, May 11, 1991 and as amended Mar 26, 1996, the Government, the Environmental Protection Agency ("EPA") and Commonwealth of Massachusetts Department of Environmental Protection and their officers, agents, employees, contractors, and subcontractors have the right, upon reasonable notice to the Transferee, to enter upon the Transferred Premises in any case in which a response action or corrective action is found to be necessary, after the date of transfer of the property, such access is necessary to carry out a response action or

corrective action on adjoining property, including, without limitation, the following purposes:

- * To conduct investigations and surveys, including, where necessary, drilling, soil and water sampling, testing-pitting, test soil borings and other activities;
- * To inspect field activities of the Government and its contractors and subcontractors;
- * To conduct any test or survey related to the environmental conditions at the Transferred Property or to verify any data submitted to the EPA or Massachusetts Department of Environmental Protection by the Government relating to such conditions;
- * To construct, operate, maintain or undertake any other response or remedial actions as required or necessary including, but not limited to monitoring wells, pumping wells and treatment facilities.

No Liability for Non-Army Contamination

Except as provided under Section 120(h) of CERCLA and the Quitclaim Deed the Army assumes no liability for additional response action or corrective action, found to be necessary after the date of transfer, in any case in which the person or entity to whom the property is transferred, or other non-Army entities, is identified as the party responsible for contamination of the property.

Use Restrictions

The DOD has undertaken careful environmental study of the property and concluded, with the Grantee's/Transferee's concurrence, that the highest and best use of the property is limited, as result of its environmental condition, to commercial and industrial uses (Lease Parcels A2a (AOC9) and A8 (SA13)) or open space and recreation uses (Lease Parcel A4 (AOC40)). In order to protect human health and the environment and further the common environmental objectives and land use plans of the United States, Massachusetts and Grantee/Transferee Massachusetts Development Finance Agency, the covenants and restrictions shall be included to assure the use of the property is consistent with environmental condition of the Property. These following restrictions and covenants benefit the lands retained by the Grantor and the public welfare generally and are consistent with state and federal environmental statutes.

Restrictions and Conditions. The Grantee /Transferee covenants for itself, its successors, and assigns not to use the Property for residential purposes unless evaluated by a Massachusetts Licensed Environmental Professional who shall render an opinion acceptable to the EPA and MDEP as to whether the proposed residential use is protective of human health, the environment, safety and public welfare and is consistent with the conclusion that no substantial hazards remain. Any and all requirements set forth by the EPA and MDEP to meet the objective of this FOST shall be satisfied before any such activity or use is commenced. The Property has been remediated in accordance with the ROD. The Grantee/Transferee, for itself, its successors or assigns covenants that it will not undertake nor allow any activity on or use of the property that would violate the restrictions contained herein. These restrictions and covenants are binding on the Grantee/Transferee, its successors and assigns; shall run with the land; and are forever enforceable. Nothing contained herein shall preclude the Grantee/Transferee from undertaking, in accordance with applicable laws and regulations and without any cost to

the Grantor, such additional remediation necessary to allow for residential use of the Property. Upon completion of such remediation required to allow residential use of the Property and upon the Grantee's/Transferee's obtaining the approval of the EPA and MDEP and, if required, any other regulatory agency, the Grantor agrees, without cost to the United States, to release or, if appropriate, modify this restriction by recordation of an amendment hereto.

Deed Notification for Property Use

1. Radon Notification

The Transferee hereby acknowledges receipt of the available radon assessment data pertaining to the former Fort Devens, which are located in the EBS. There are no structures or buildings on the Property, but the radon assessment data indicate that certain buildings at Fort Devens had levels of radon above EPA's radon reduction level of 4 picocuries/liter. A radiation induced increased risk of contracting lung cancer is the primary health concern with elevated levels of indoor radon. The Transferee acknowledges that it has had the opportunity to inspect the Property as to radon levels prior to accepting the Property. Failure of the Transferee to inspect or to be fully informed as to the radon levels of the Property and the former Fort Devens will not constitute grounds for any claim or demand against the United States. The Transferee further agrees to bear full responsibility for and discharge the Army from and against all suits, claims, demands, or actions, liabilities, judgments, costs and attorneys' fees to the extent arising out of, or in any manner predicated upon personal injury, death or property damage resulting from, related to, caused by or arising out of exposure to radon on any portion of the Property after conveyance of the Property or any future redemption or abatement of radon or the need therefore.

2. MEC Notification

The Army completed a comprehensive records search, and based on that search, has undertaken and completed statistical and physical testing of areas on the Property, if any, where the existence of munitions and explosives of concern ("MEC") was considered to be present. The term "MEC" means military munitions that may pose unique explosives safety risks, including: (A) unexploded ordnance (UXO), as defined in 10 U.S.C. 2710 (e) (9); (B) discarded military munitions (DMM), as defined in 10 U.S.C. 2710 (e) (2); or (C) explosive munitions constituents (e.g. TNT, RDX) present in high enough concentrations to pose an explosive hazard. Based upon said survey, the Army represents that, to the best of its knowledge, no MEC is currently present on the Property. Notwithstanding the survey conducted by the Army, the parties acknowledge that given the finding of potential MEC contamination on other parcels at Fort Devens, and due to the former use of the Property as part of an active military installation and training grounds, there is a possibility that MEC may exist on the Property. In the event that the Transferee, its successors and assigns, or any other person should discover any MEC on the Property, it shall not attempt to remove or destroy it, but shall immediately notify the local Police Department and Army, or Army's designated explosive ordnance representative. Personnel will be dispatched promptly to dispose of such ordnance at no expense to the Transferee.

ENCLOSURE 6

**FINDING OF SUITABILITY TO TRANSFER
LEASE PARCELS A2A, A4, & A8
FORT DEVENS, MASSACHUSETTS**

PUBLIC NOTICE AND REGULATORY COMMENTS

PUBLIC NOTICE



LegalNoticeForFOST.
pdf

REGULATORY COMMENTS


FOSTLandConSitiesco
m.rtf

FOR SALE Notice

LEGAL NOTICE

Devens Reserves Forces
Training Area
U.S. Army

PUBLIC NOTICE

The Devens RFTA Base
Realignment and Closure
(BRAC) Environmental Office
hereby announces, pursuant
to the Comprehensive Envi-
ronmental Response, Com-
pensation and Liability Act of
1980 (CERCLA) as amended
by the Superfund Amend-
ments Reauthorization Act of
1986, that the Draft Finding of
Suitability to Transfer (FST)
for Lease Purchase A2A (ACC
9), A4 (ACC 43), and A8 (SA
13) is being released for
public comment. This com-
ment period starts November
18, 2004 and extends to
December 20, 2004. Com-
ments can be sent to:

Mr. Peter Kossin

BRAC Environmental Office
30 Quebec Street, Unit 100
Devens, MA 01434-4470

This document has been
forwarded to the Massachu-
setts Department of Environ-
mental Protection (MADEP),
Federal Environmental Pro-
tection Agency (USEPA), and
the Postmaster General.
Bases (BAS). They are avail-
able at the public libraries in
Harvard, Ayer, Lancaster, and
Shirley.

November 17, 2004

A6 WEDNESDAY, NOVEMBER 17, 2004

Sentinel & Enterprise

Fitchburg-Leominster, Massachusetts
A MediaNews Group Newspaper

Fitchburg Sentinel
1838

Leominster Enterprise
1873

INCORPORATED 1873

ASA COLE, Publisher

JEFF McMENEMY, Editor

PATRICK DELANEY, Accounting Manager

NORMAN SINCLAIR, Circulation Director

MARK LAPRADE, Sales and Marketing Director

Volume 164, No. 323

**EPA COMMENTS ON THE DRAFT FINDING OF SUITABILITY TO TRANSFER
LEASE PARCEL: A2A (AOC9), A4 (AOC40), AND A8 (SA13)
FORT DEVENS, MASSACHUSETTS**

1. **Comment:** When there is a reference in the document to any Guidance, ROD or other publication please refer to the publication by full title and date.

Response: Agreed.

2. **Comment:** Please identify the Lease parcels by AOC number or Study Area number as well as Lease parcel number wherever mentioned in the document.

Response: Agreed.

3. **Comment:** Please identify the applicable ROD and date signed in the first paragraph.

Response: Agreed.

4. **Comment:** The DOD "Guidance" of June 1, 1994 provides on p. 5 "Before the signing of a FOST, an analysis of the intended use of the property, if known, will be conducted" including an evaluation of the environmental suitability of the property for the intended purpose and a listing of specific recommended restrictions on the use of the property, if any. What are the intended uses of the property? What is the present zoning or classification of the property under the reuse plan?

Response: Intended Property Use. On a Devens, Massachusetts map reflecting the revised zoning districts boundaries approved by the Devens Enterprise Commission on May 29, 2001, Leased Parcel A2A (AOC 9) is zoned for "Innovation & Technology Center"; Leased Parcel A4 (AOC 40) is zoned for "Open Space/Recreation"; and Leased Parcel A8 (SA 13) is zoned for "Innovation & Technology Business" The Final FOST indicates that the properties are suitable for the intended purposes.

5. **Comment:** Are there any remaining restrictions on the lease parcels--i.e Institutional Controls? The first paragraph states "In addition, the FOST identifies use restrictions as specified in the attached Environmental Protection Provisions necessary to protect human health or the environment after such transfer" but I only found notices rather than use restrictions. If the property is only suitable for commercial/industrial use, the FOST should identify how it will be restricted to that use.

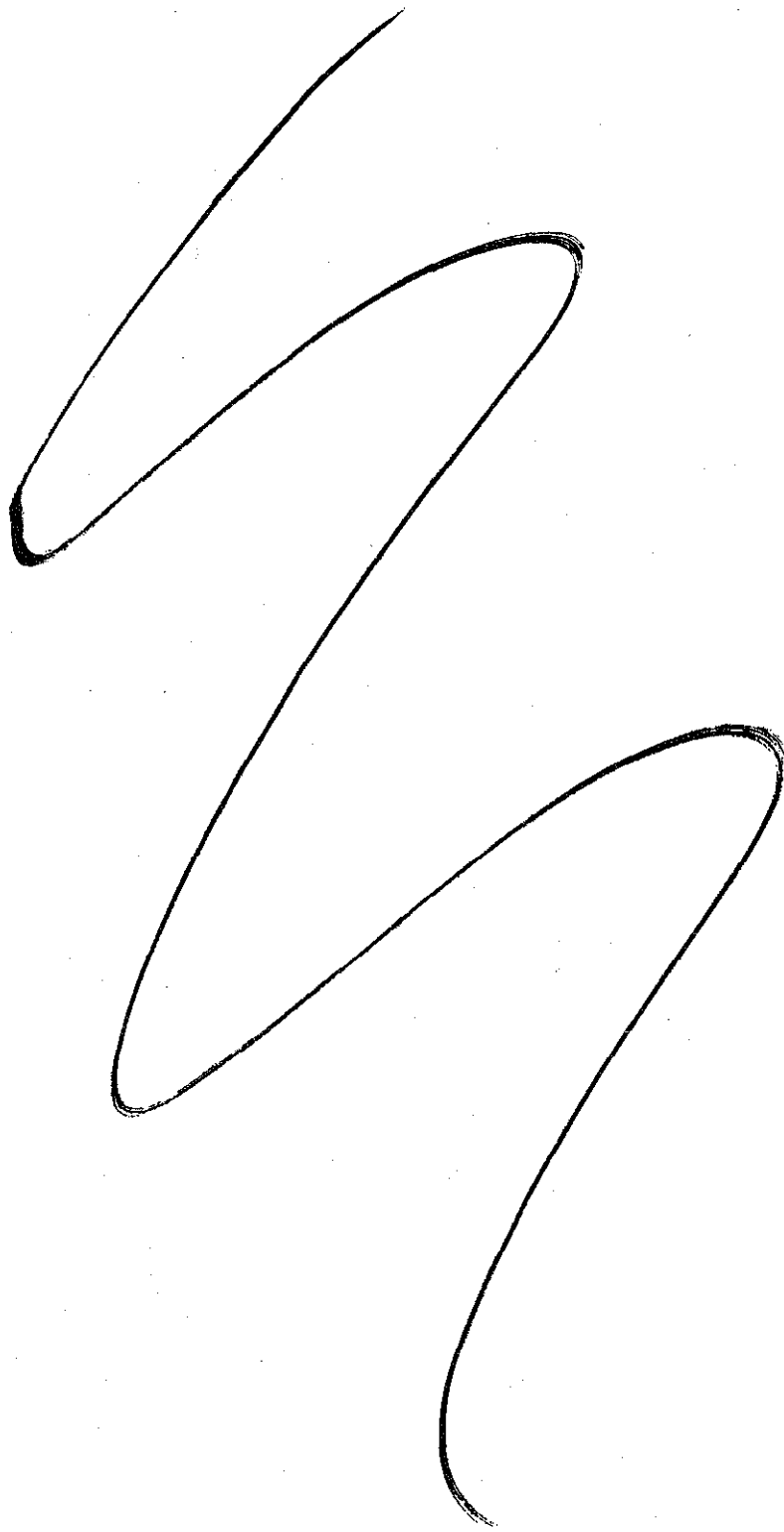
Response: The Environmental Protection Provisions indicate that residential use of the property is restricted.

6. **Comment:** Section 3.2.2, ¶ 1 - Please mention "soil contamination" as well as groundwater contamination.

Response: Agreed.

- 7) **Comment:** Please proof read document for various typographical errors.

Response: Agreed.



**ADDITIONAL EPA COMMENTS DATED JANUARY 31, 2005 ON
THE DRAFT FINDING OF SUITABILITY TO TRANSFER
LEASE PARCEL: A2A (AOC9), A4 (AOC40), AND A8 (SA13)
FORT DEVENS, MASSACHUSETTS**

- 1) Comment: The deed language under "Use Restrictions" (page 2 of Enclosure 5) includes a restriction against using the property for residential purposes. Consequently, the Army's response to EPA's comment #5 on the prior draft version of the FOST (page 1 of Enclosure 6), which indicates that "*There are no restrictions or institutional controls on the Leased Parcels*" should be modified to acknowledge the restriction on residential use present in the deed.

Response: The response to the previous EPA Comment #5 has been revised to indicate that the property is restricted from residential uses.

- 2) The deed language states that the residential restriction can be removed at some later date if there is some further remedial action and if the approval of the MADEP is obtained (page 3 of Enclosure 5). Modify this to include that EPA's approval should also be obtained.

Response: The text has been modified to include US EPA approval.

- 3) There are still a few typographical errors in the document that should be addressed

Response: The Final FOST has been proofread.

**MADEP COMMENTS ON THE DRAFT
FINDING OF SUITABILITY TO TRANSFER
LEASE PARCEL: A2A (AOC9), A4 (AOC40), AND A8 (SA13)
FORT DEVENS, MASSACHUSETTS**

MADEP concurs with the Draft FOST for Parcels A2A (AOC 9), A4 (AOC 40) and A8 (SA13).

ATTEST: WORC. Anthony J. Vigliotti, Register



APPENDIX C

List of Documents Reviewed

ABB Environmental Services, Inc. (ABB) 1993. *Final Remedial Investigation Addendum Report*, December.

ABB, 1994. *Supplemental Site Investigations Data Packages Groups 2 & 7, Fort Devens, Massachusetts*; January.

ABB, 1995. *Revised Final Groups 2 & 7 Site Investigation Report, Fort Devens, Massachusetts*; October.

ABB, 1996. *Revised Final Site Investigation Report – Groups 3, 5, & 6, Fort Devens, Massachusetts*, January.

Deed, 2006. Quitclaim Deed, Parcels A2A, A4, and A8, Between Defense Base Closure and Realignment Act of 1990, the United States of America, acting by and through the Department of the Army and Massachusetts Development Finance Agency. BK 38514. Pg 121. March.

Deed, 2007. Quitclaim Deed, Parcel A.15, Between United States of America, acting by and through the Department of the Army and Massachusetts Development Finance Agency. BK 50024. pg 85. July.

EA Engineering, Science, and Technology, 1999. *Design Analysis Report for Consolidation Landfill- Devens Reserve Forces Training Area*, August.

Harding Lawson Associates (HLA), 1999. *Record of Decision, Devens Consolidation Landfill*, Devens, Massachusetts. July.

HLA, 2000. *First Five-Year Review Report for Devens Reserve Forces Training Area*, Devens, Massachusetts. September.

HydroGeoLogic, Inc. (HGL), 2010 *Five-Year Review Report, Former Fort Devens Army Installation*, Devens, Massachusetts. September.

HGL, 2011. *2010 Annual Report Long-Term Monitoring Former Fort Devens Army Installation*. March.

H&S Environmental, Inc. 2015. (H&S) *2015 Five Year Review Report, Former Fort Devens Army Installation BRAC Legacy Sites*. Devens, Massachusetts. September.

Koman Government Solutions LLC (KGS), 2016. *2015 Annual Report Long Term Monitoring, Former Fort Devens Army Installation*. November.

M2S JV and HGL, 2015. *2014 Draft Annual Report Long-Term Monitoring Former Fort Devens Army Installation*. April.

Nobis Engineering, Inc., 2005. *2005 Five-Year Review Report, Former Fort Devens*, Devens, Massachusetts. September.

Shaw Environmental, Inc. (Shaw) 2003a. *Remedial Action Closure Report, Consolidation Landfill. Landfill Remediation Project. Devens Reserve Training Area*. Devens, Massachusetts. September.

Shaw, 2003b. *Remedial Action Closure Report, Remediation & Restoration Sites AOC 9, AOC 11, AOC 40, AOC 41, SA 12, SA 13, Other Areas*. Landfill Remediation Project. Devens Reserve Training Area. Devens, Massachusetts. September.

Sovereign and HGL, 2012. *2011 Annual Report Long-Term Monitoring Former Fort Devens Army Installation*. February.

Sovereign and HGL, 2013. *2012 Annual Report Long-Term Monitoring Former Fort Devens Army Installation*. May.

Sovereign and HGL, 2014. *2013 Annual Report Long-Term Monitoring Former Fort Devens Army Installation*. June.

Sovereign and HGL, 2015. *Final Long Term Monitoring and Maintenance Plan for Former Fort Devens Army Installation and Sudbury Annex*, February.

Stone & Webster (S&W), 2000a. *Remedy Selection Report On-Site Versus Off-Site Disposal Options, Landfill Remediation Project, Devens Reserve Training Area, Devens, Massachusetts*. March.

S&W, 2000b. *Sampling and Analysis Plan*. February.

S&W, 2002. *Habitat Restoration Work Plan – Devens Landfill Remediation Project*. January.



APPENDIX D
ARARs

TABLE B.1
SYNOPSIS OF FEDERAL AND STATE LOCATION-SPECIFIC ARARS FOR ALTERNATIVE 4C
RECORD OF DECISION
SAs 6, 12, AND 13 AND AOCs 9, 11, 40 AND 41
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
Federal	Floodplains	Floodplain Management Executive Order 11988 [40 CFR Part 6, Appendix A]	Applicable AOC 9 AOC 11 AOC 40	Requires federal agencies to evaluate the potential adverse effects associated with direct and indirect development of a floodplain. Alternatives that involve modification/construction within a floodplain may not be selected unless a determination is made that no practicable alternative exists. If no practicable alternative exists, potential harm must be minimized and action taken to restore and preserve the natural and beneficial values of the floodplain.	Drum removal and hot-spot sediment removal will be designed to minimize alteration/destruction of floodplain area. If this alternative is chosen, wetlands adversely affected by remedial action will be restored to the extent necessary.
	Wetlands	Protection of Wetlands Executive Order 11990 [40 CFR Part 6, Appendix A]	Applicable AOC 9 AOC 11 AOC 40	Under this Order, federal agencies are required to minimize the destruction, loss, or degradation of wetlands, and preserve and enhance natural and beneficial values of wetlands. If remediation is required within wetland areas, and no practical alternative exists, potential harm must be minimized and action taken to restore natural and beneficial values.	Drum removal and hot-spot sediment removal will be designed to minimize alteration/destruction of floodplain area. If this alternative is chosen, wetlands adversely affected by remedial action will be restored to the extent necessary.
	Wetlands, Aquatic Ecosystem	Clean Water Act, Dredge or Fill Requirements Section 404 [40 CFR Part 230]	Relevant and Appropriate AOC 9 AOC 11 AOC 40	Section 404 of the Clean Water Act regulates the discharge of dredged or fill materials to U.S. waters, including wetlands. Filling wetlands would be considered a discharge of fill materials. Guidelines for Specification of Disposal Sites for Dredged or Fill material at 40 CFR Part 230, promulgated under Clean Water Act Section 404(b)(1), maintain that no discharge of dredged or fill material will be permitted if there is a practical alternative that would have less effect on the aquatic ecosystem. If adverse impacts are unavoidable, action must be taken to restore, or create alternative wetlands.	The removal of drums/sediments will be designed to minimize placement or fill in wetland areas. If this alternative is chosen, the affected areas will be restored to the extent necessary.

TABLE B.1
SYNOPSIS OF FEDERAL AND STATE LOCATION-SPECIFIC ARARS FOR ALTERNATIVE 4C

RECORD OF DECISION
SAs 6, 12, AND 13 AND AOCs 9, 11, 40 AND 41
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
Federal	Surface Waters, Endangered Species, Migratory Species	Fish and Wildlife Coordination Act [16 USC 661 <u>et. seq.</u>]	Relevant and Appropriate AOC 9 AOC 11 AOC 40 SA 13	Actions that affect species/habitat require consultation with U.S. Department of Interior, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and/or state agencies, as appropriate, to ensure that proposed actions do not jeopardize the continued existence of the species or adversely modify or destroy critical habitat. The effects of water-related projects on fish and wildlife resources must be considered. Action must be taken to prevent, mitigate, or compensate for project-related damages or losses to fish and wildlife resources. Consultation with the responsible agency is also strongly recommended for on-site actions. Under 40 CFR Part 300.38, these requirements apply to all response activities under the National Contingency Plan.	To the extent necessary, action will be taken to develop measures to prevent, mitigate, or compensate for project related impacts to habitat and wildlife. The U.S. Fish and Wildlife Service, acting as a review agency for the USEPA, will be kept informed of proposed remedial actions.
	Endangered Species	Endangered Species Act [50 CFR Parts 17.11-17.12]	Applicable AOC 9 AOC 11 AOC 40 SA 13 Consolidation Facility	This act requires action to avoid jeopardizing the continued existence of listed endangered or threaten species or modification of their habitat.	The protection of endangered species and their habitats will be considered during excavation activities and cover installation.
	Atlantic Flyway, Wetlands, Surface Waters	Migratory Bird Treaty Act [16 USC 703 <u>et seq.</u>]	Relevant and Appropriate AOC 11	The Migratory Bird Treaty Act protects migratory birds, their nests, and eggs. A depredation permit is required to take, possess, or transport migratory birds or disturb their nests, eggs, or young.	Remedial actions will be performed to protect migratory birds, their nests, and eggs.

TABLE B.1
SYNOPSIS OF FEDERAL AND STATE LOCATION-SPECIFIC ARARS FOR ALTERNATIVE 4C

RECORD OF DECISION
SAs 6, 12, AND 13 AND AOCs 9, 11, 40 AND 41
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
State	Floodplains, Wetlands, Surface Waters	Massachusetts Wetland Protection Act and regulations [MGL c. 131 s. 40; 310 CMR 10.00]	Applicable AOC 9 AOC 11 AOC 40 SA 13	These regulations include standards on dredging, filling, altering, or polluting inland wetlands and protected areas (defined as areas within the 100-year floodplain). A Notice of Intent (NOI) must be filed with the municipal conservation commission and a Final Order of Conditions obtained before proceeding with the activity. A Determination of Applicability or NOI must be filed for activities such as excavation within a 100 foot buffer zone. The regulations specifically prohibit loss of over 5,000 square feet of bordering vegetated wetland. Loss may be permitted with replication of any lost area within two growing seasons.	All work to be performed within wetlands and the 100 foot buffer zone will be in accordance with the substantive requirements of these regulations.
	Endangered Species	Massachusetts Endangered Species Regulations [321 CMR 8.00]	Applicable AOC 9 AOC 11 AOC 40 SA 13 Consolidation Facility	Actions must be conducted in a manner that minimizes the impact to Massachusetts-listed rare, threatened, or endangered species, and species listed by the Massachusetts Natural Heritage Program.	The protection of state listed endangered species (in particular the Grasshopper Sparrow at the Consolidation Facility) will be considered during the design and implementation of this alternative.

Notes:

AWQC = Ambient Water Quality Criteria
CFR = Code of Federal Regulations
CMR = Code of Massachusetts Rules
CWA = Clean Water Act
DOI = Department of the Interior
FWS = Fish and Wildlife Services
MEPA = Massachusetts Environmental Policy Act
MGL = Massachusetts General Laws
NMFS = National Marine Fisheries Service
USC = United States Code

Note: A Record Notice of Landfill Operation for AOC 11 is not necessary with Alternative 4c.

TABLE B.2
SYNOPSIS OF FEDERAL AND STATE CHEMICAL-SPECIFIC ARARS FOR ALTERNATIVE 4C

RECORD OF DECISION
SAs 6, 12, AND 13 AND AOCs 9, 11, 40 AND 41
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
Federal	Surface water	Clean Water Act, Ambient Water Quality Criteria [40 CFR 131; Quality Criteria for Water 1986]	Relevant and Appropriate AOC 11 AOC 40	Federal Ambient Water Quality Criteria (AWQC) include (1) health-based criteria development for 95 carcinogenic and noncarcinogenic compounds and (2) acute and chronic toxicity values for the protection of aquatic life. AWQC for the protection of human health provide protective concentrations for exposure from ingesting contaminated water and contaminated aquatic organisms, and from ingesting contaminated aquatic organisms alone. Remedial actions involving contaminated surface water or discharge of contaminants to surface water must consider the uses of the water and the circumstances of the release or threatened release.	Remedial actions will be performed in a manner to prevent AWQC exceedances in surface water. Activities at AOC 11 will be performed to prevent AWQC exceedances in the Nashua River. Removal of sediment at AOC 40 will be performed in a manner to prevent AWQC exceedances in Cold Spring Brook Pond. Supernatant from dredged spoil will be monitored to prevent AWQC exceedances in Cold Spring Brook Pond.
	Groundwater	Safe Drinking Water Act, National Primary Drinking Water Regulations, MCLs and MCLGs (40 CFR Parts 141.60 - 141.63 and 141.50 - 141.52]	Relevant and Appropriate AOC 40	The National Primary Drinking Water Regulations establish Maximum Contaminant Levels (MCLs) and Maximum Contaminant Level Goals (MCLGs) for several common organic and inorganic contaminants. MCLs specify the maximum permissible concentrations if contaminants in public drinking water supplies. MCLs are federally enforceable standards based in part on the availability and cost of treatment techniques. MCLGs specify the maximum concentration at which no known or anticipated adverse effect on humans will occur. MCLGs are non-enforceable health based goals set equal to or lower than MCLs.	At AOC 40 the MCL for bis(2-ethylhexyl) phthalate will be met under average scenario, and the MCL for arsenic will be met under average and maximum scenario. MCLs are not exceeded at Patton Well.

TABLE B.2
SYNOPSIS OF FEDERAL AND STATE CHEMICAL-SPECIFIC ARARS FOR ALTERNATIVE 4C

RECORD OF DECISION
SAs 6, 12, AND 13 AND AOCs 9, 11, 40 AND 41
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
State	Surface water	Massachusetts Surface Water Quality Standards [314 CMR 4.00]	Relevant and Appropriate AOC 11 AOC 40	Massachusetts Surface Water Quality Standards designate the most sensitive uses for which surface waters of the Commonwealth are to be enhanced, maintained, and protected, and designate minimum water quality criteria for sustaining the designated uses. Surface waters at Fort Devens are classified as Class B. Surface waters assigned to this class are designated as habitat for fish, other aquatic life and wildlife, and for primary and secondary contact recreation. These criteria supersede federal AWQC only when they are more stringent (more protective) than the AWQC.	At AOC 11 activities will be performed in a manner to prevent exceedances of surface water quality in the Nashua River. At AOC 40 sediment removal will be performed in a manner to prevent exceedances of Surface Water Quality Standards in Cold Spring Brook Pond. Supernatant from dredged spoil dewatering will be monitored to prevent exceedances in the pond. To the extent necessary, Surface Water Quality Standards will be used to develop discharge limitations.
	Groundwater	Massachusetts Groundwater Quality Standards [314 CMR 6.00]	Relevant and Appropriate AOC 40	These standards designate and assign uses for which groundwaters of the Commonwealth shall be maintained and protected, and set forth water quality criteria necessary to maintain the designated uses. Groundwater at Fort Devens is classified as Class I, fresh groundwaters designated as a source of potable water supply.	At AOC 40 the MCL for bis(2-ethylhexyl)phthalate will be met under average scenario, and the MCL for arsenic will be met under average and maximum scenario. MCLs are not exceeded at Patton Well.
	Groundwater	Massachusetts Drinking Water Regulations [310 CMR 22.00]	Relevant and Appropriate AOC 40	These regulations list Massachusetts MCLs which apply to drinking water distributed through a public water system.	At AOC 40 the MCL for bis(2-ethylhexyl)phthalate will be met under average scenario, and the MCL for arsenic will be met under average and maximum scenario. MCLs are not exceeded at Patton Well.

Notes:

AWQC = Ambient Water Quality Criteria
CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act
CFR = Code of Federal Regulations
CMR = Code of Massachusetts Rules
CWA = Clean Water Act
MCL = Maximum Contaminant Rules
MCLG = Maximum Contaminant Level Goal
MMCL = Massachusetts Maximum Contaminant Level
NPDWR = National Primary Drinking Water Regulations
SDWA = Safe Drinking Water Act
SMCL = Secondary Maximum Contaminant Level

Note: A Record Notice of Landfill Operation for AOC 11 is not necessary with Alternative 4c.

TABLE B.3
SYNOPSIS OF FEDERAL AND STATE ACTION-SPECIFIC ARARS FOR ALTERNATIVE 4C

RECORD OF DECISION
SAs 6, 12, AND 13 AND AOCs 9, 11, 40 AND 41
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
Federal	Construction over/in navigable waters	Rivers and Harbors Act of 1899 [33 USC 401 <u>et seq.</u>]	Relevant and Appropriate AOC 40 AOC 11	Section 10 of the Rivers and Harbors Act of 1899 requires an authorization from the Secretary of the Army, acting through the U.S. Army Corps of Engineers (USACE), for the construction of any structure in or over any "navigable water of the U.S."; the excavation from or deposition of material in such waters, or any obstruction of alteration in such waters.	Excavating, filling, and disposal activities will be conducted to meet the substantive criteria and standards of these regulations.
	Control of surface water runoff, Direct discharge to surface water	Clean Water Act NPDES Permit Program [40 CFR 122, 125]	Relevant and Appropriate AOC 9 AOC 11 AOC 40 SA 13 Consolidation Facility	The National Pollutant Discharge Elimination System (NPDES) permit program specifies the permissible concentration or level of contaminants in the discharge from any point source, including surface runoff, to waters of the United States.	Construction activities will be controlled to meet USEPA discharge requirements. On-site discharge will meet the substantive requirements of these regulations.
	Land Disposal of Hazardous Wastes	Resource Conservation and Recovery Act (RCRA), Land Disposal Restrictions (LDRs); (40 CFR Part 268)	Applicable AOC 9 AOC 11 AOC 40 SA 13	Land disposal of RCRA hazardous wastes without specified treatment is restricted. Remedial actions must be evaluated to determine if they constitute "placement" and if LDRs are applicable. The LDRs require that wastes must be treated either by a treatment technology or to a specific concentration prior to disposal in a RCRA Subtitle C permitted facility.	If it is determined that materials excavated from AOCs 9, 11, 40, or SA 13 are hazardous materials subject to LDRs, the materials will be handled and disposed of in compliance with these regulations.
	Disposal of PCB-contaminated wastes	Toxic Substance Control act Regulations [40 CFR Part 761]	Applicable AOC 9 AOC 11 AOC 40 SA 13	Establish prohibitions of and requirements for the manufacturing, processing, distribution in commerce, use, disposal, storage and marking of PCB items. Sets forth the "PCB Spill Cleanup Policy."	If it is determined that materials excavated from AOCs 9, 11, 40 or SA 13 are contaminated with PCBs at concentrations of 50 ppm or greater, the materials will be handled and disposed of in compliance with these regulations.
State	Solid Waste Landfill Siting	Massachusetts Solid Waste Facilities Site Regulations [310 CMR 16.00]	Applicable Consolidation Facility	These regulations outline the requirements for selecting the site of a new solid waste landfill for the Commonwealth of Massachusetts.	The consolidation facility will be sited in accordance with these regulations.

**TABLE B.3
SYNOPSIS OF FEDERAL AND STATE LOCATION-SPECIFIC ARARS FOR ALTERNATIVE 4C**

**RECORD OF DECISION
SAs 6, 12, AND 13 AND AOCs 9, 11, 40 AND 41
DEVENS, MA**

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
State	Solid Waste Landfill Construction, Operation, Closure, and Post-Closure Care	Massachusetts Solid Waste Management Regulations [310 CMR 19.000]	Relevant and Appropriate AOC 9, AOC 11, SA 12, SA 13 Consolidation Facility	These regulations outline the requirements for construction, operation, closure, and post closure at solid waste management facilities in the Commonwealth of Massachusetts.	Final closure and post-closure plans will be prepared and submitted to satisfy the requirements of 310 CMR 19.021 for AOCs 9, 11, and 40, and SAs 12 and 13. The consolidation landfill will be constructed, operated, and closed in conformance with the regulations at 310 CMR 19.000. A Record Notice of Landfill Operation will be filed for AOC 11 in accordance with 310 CMR 19.141.
	Activities that potentially affect surface water quality	Massachusetts Water Quality Certification and Certification for Dredging [314 CMR 9.00]	Relevant and Appropriate AOC 40	For activities that require a MADEP Wetlands Order of Conditions to dredge or fill navigable waters or wetlands, a Chapter 91 Waterways License, a USACE permit or any major permit issued by USEPA (e.g., Clean Water Act NPDES permit), a Massachusetts Division of Water Pollution Control Water Quality Certification is required pursuant to 314 CMR 9.00.	Excavation, filling, and disposal activities will meet the substantive criteria and standards of these regulations. Remedial activities will be designed to attain and maintain Massachusetts Water Quality Standards in affected waters.
	Activities that affect ambient air quality	Massachusetts Air Pollution Control Regulations [310 CMR 7.00]	Applicable AOC 9 AOC 11 AOC 40 SA 13 Consolidation Facility	These regulations pertain to the prevention of emissions in excess of Massachusetts ambient air quality standards.	Remedial activities will be conducted to meet the standards for Visible Emissions (310 CMR 7.06); Dust, Odor, Construction and Demolition (310 CMR 7.09); Noise (310 CMR 7.10); and Volatile Organic Compounds (310 CMR 7.18).

Notes:

CFR = Code of Federal Regulations
CMR = Code of Massachusetts Rules
CWA = Clean Water Act
MADEP = Massachusetts Department of Environmental Protection
MGL = Massachusetts General Laws
NPDES = National Pollutant Discharge Elimination System
RCLA = Comprehensive Environmental Response, Compensation, and Liability Act
USACE = U.S. Army Corps of Engineers
USC = United States Code

Note: A Record Notice of Landfill Operation for AOC 11 is not necessary with Alternative 4c.

SYNOPSIS OF FEDERAL AND STATE LOCATION-SPECIFIC ARARS FOR ALTERNATIVE 4C
THAT WERE REVISED SINCE THE RECORD OF DECISION

SAs 9, 11, 40
DEVENS, MA

REGULATORY AUTHORITY	LOCATION CHARACTERISTIC	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	ACTION TO BE TAKEN TO ATTAIN REQUIREMENT
Federal	Floodplains	Floodplain Management, 44 CFR 9, Executive Order 11988	Applicable AOC 9 AOC 11 AOC 40	Federal Emergency Management Agency regulations that set forth the policy, procedure and responsibilities to implement and enforce Executive Order 11988, Floodplain Management.	Drum removal and hot-spot sediment removal was designed to minimize alteration/destruction of floodplain area. Wetlands adversely affected by remedial action were restored to the extent necessary.
	Wetlands	Protection of Wetlands, 44 CFR 9, Executive Order 11990	Applicable AOC 9 AOC 11 AOC 40	Under this Order, as implemented through 44 CFR 9, federal agencies are required to minimize the destruction, loss, or degradation of wetlands, and preserve and enhance natural and beneficial values of wetlands. If remediation is required within wetland areas, and no practical alternative exists, potential harm must be minimized and action taken to restore natural and beneficial values.	Drum removal and hot-spot sediment removal was designed to minimize alteration/destruction of floodplain area. Wetlands adversely affected by remedial action were restored to the extent necessary.