Defense Depot Memphis, Tennessee Main Installation

Annual Site Inspection Form

Pursuant to the Land Use Control Implementation Plan (LUCIP) dated February 2004 (Appendix C of Rev. 1 Final Main Installation Remedial Design dated July 2004) for the former Defense Depot Memphis, Tennessee - Main Installation (Memphis Depot), an inspection at the Memphis Depot was conducted by HDR, Inc. on 6 July, 2016.

A summary of the land use restrictions is as follows:

- No residential land use or other child-occupied facilities including daycare on the Main Installation (except Parcels 1 and 2 of Functional Unit [FU] 6).
- No production/consumptive use of groundwater or drilling groundwater wells on the Main Installation.
- Table 1 Summary of Land Use Controls and Monitoring Requirements, Figure 1 Land Use Restrictions Map and Figure 2 Groundwater Use Restrictions from the Main Installation LUCIP are attached.

Verification that land use restrictions are being accomplished and LUCs remain effective

- Verify that boundary fence surrounding golf course area in FU2 remains intact.
 - o Visual inspection conducted on 6 July 2016. No deficiencies or required repairs were identified.
 - o Interviewed Mr. Vince Alfonso of Memphis Athletic Ministries (MAM), which leases the golf course from the City of Memphis (14 July 2016). He stated MAM maintains the golf course fence and, in the past year, has repaired several small holes and one area of major damage. The major damage was at the northeast corner of the golf course and resulted from a vehicle on the adjacent property (Alpha Omega). He stated repairs usually occur within 24 hours of observation.
- Verify that no residential housing/development or child daycare activities are occurring at the site (except Parcels 1 and 2 of FU6).
 - o Visual inspection conducted on 6 July 2016. No deficiencies identified.
 - o Interviewed the following property owners/managers: Ms. Anita Bunn of Colliers International the property management firm for the Memphis Depot Industrial Park (28 June 2016); Mr. Greg Ward of Barnhart Crane (28 June 2016); Mr. Randy Richardson, Executive Director of Port of Memphis and Vice President of Port and Industrial Property for the Memphis/Shelby County Economic Development Growth Engine (28 June 2016). All confirmed no residential housing/development or child daycare activities are occurring at their property on the site.
 - Obtained current tenant list from Colliers International on 29 June 2016. No residential housing/development or child daycare activities are listed at the Memphis Depot Industrial Park.

- Verify that no groundwater wells have been installed at the site (except for monitoring and injection wells that were installed as part of the remedy) and that no production/consumptive use of groundwater is occurring.
 - o Visual inspection conducted on 6 July 2016. No deficiencies identified.
 - o Interviewed Mr. Greg Parker, Memphis/Shelby County Health Department Pollution Control Division, Water Quality Control on 28 June 2016. Mr. Parker confirmed that no permits have been issued for construction of consumptive use/production groundwater wells at the Main Installation.
 - o Interviewed the following property owners/managers: Ms. Anita Bunn of Colliers International the property management firm for the Memphis Depot Industrial Park (28 June 2016); Mr. Greg Ward of Barnhart Crane (28 June 2016); and Mr. Randy Richardson, Executive Director of Port of Memphis and Vice President of Port and Industrial Property for Economic Development Growth Engine of Memphis/Shelby County (28 June 2016). All confirmed no groundwater extraction wells have been installed at their property on the site and no production/consumptive use of groundwater is occurring.

Description of any deficiency or violation of the land use restrictions

No deficiencies or violations identified.

Description of any proposed measures or corrective actions taken to remedy the deficiency or violation

No proposed measures or corrective actions are necessary.

Certification Statement

I, the undersigned, do document that the inspection was performed as indicated above, and that the above information is true and correct to the best of my knowledge, information, and belief.

Date: 03 August 2016

Name/Title: Todd Calhoun/Project Manager

Organization: Trinity Analysis & Development Corp.

Signature:

Completed annual inspection forms shall be sent within thirty (30) days of the inspection to:

HQ Department of the Army Office of the Chief of Staff for Installation Management Attn: BRAC Division (DAIM-ODB) (Carolyn Jones, PM) 2530 Crystal Drive (Taylor Bldg), Room 5140E Arlington, VA 22202-3940

U. S. Environmental Protection Agency, Region 4 Carol Monell, Chief Restoration & Sustainability Branch, Superfund Division 61 Forsyth Street, SW Atlanta, GA 30303

Tennessee Department of Environment and Conservation Division of Remediation Memphis Field Office Attn: Jordan English 8383 Wolf Lake Drive Bartlett, TN 38133-4199

Table 1

Summary of Land Use Controls and Monitoring Requirements From Main Installation Land Use Control Implementation Plan

Table 1. Summary of Land Use Controls and Monitoring Requirements Main Installation - Memphis Depot, Tennessee

Type of control	Purposes of control	Duration	Implementation	Monitoring Frequency/Responsibility ¹	Affected area
Lease Restrictions A. Land Use B. Groundwater	A. Prevent residential use or daycare activities on property. B. Prevent production/consumptive use of groundwater or drilling of groundwater wells.	The term of the Master Lease ending on August 31, 2052, or the term specified in any sublease.	Master Lease entered into by the Army and the DRC includes EPP. DRC subleases are required to include Master Lease EPP that restrict land use and groundwater use.	Site Inspection – Annual. The Army will verify adherence to the LUC. LUC verification – Every 5 years as part of the required remedy review under CERCLA. The Army will verify with the DRC that all subleases contain required EPP.	All of the MI property, except Parcels 1 and 2 in FU6.
Deed Restrictions A. Land use B. Groundwater	A. Prevent residential use or daycare activities on property. B. Prevent production/ consumptive use of groundwater or drilling of groundwater wells.	Until the concentration of hazardous substances in the soil and the groundwater have been reduced to levels that allow for unlimited exposure and unrestricted use.	Drafted by Army property disposal agent in accordance with Tennessee law and recorded at the Shelby County Register of Deeds office.	Site Inspection – Annual. The Army will verify adherence to the LUC. LUC verification Every 5 years as part of the required remedy review under CERCLA. The Army will verify information properly recorded at Shelby County Register of Deeds office(s).	All of the MI property except Parcels 1 and 2 in FU6.
Notice of Land Use Restriction A. Land Use B. Groundwater	A. Prevent residential use or daycare activities on property. B. Prevent production/ consumptive uses of groundwater or drilling of groundwater wells.	Until the concentration of hazardous substances in the soil and the groundwater have been reduced to levels that allow for unlimited exposure and unrestricted use.	Drafted by Army property disposal agent in accordance with Tennessee law and recorded at the Shelby County Register of Deeds office.	Site Inspection – Annual. The Army will verify adherence to the LUC. LUC verification Every 5 years as part of the required remedy review under CERCLA. The Army will verify information properly recorded at Shelby County Register of Deeds office(s).	All of the MI property except Parcels 1 and 2 in FU6.
4. Zoning Restrictions	Allow only certain uses of the property per designation as a Light Industrial zoning district.	Until zoning district designation changes.	Zoning districts designated by City of Memphis and Shelby County LUC Board.	Site Inspection – Annual. The Army will verify adherence to the LUC. LUC verification Every 5 years as part of the required remedy review under CERCLA. The Army will verify with the City of Memphis and Shelby County the current zoning designation.	All of the MI property.

5. Groundwater Well Restrictions	Prohibit installation of drinking water well within half-mile of the site and the off-site contaminated groundwater.	Until the site is no longer a Federal Superfund site, or MSCHD determines that the drilling of a well does not pose a threat to a local aquifer.	Groundwater Well Construction Code administered by MSCHD, Water Quality Branch.	Site Inspection – Annual. The Army will verify adherence to the LUC. LUC verification Every 5 years as part of the required remedy review under CERCLA. The Army will verify with the MSCHD on the implementation of its regulation.	All of the MI property except Parcels 1 and 2 in FU6.
6. Fence	Restrict public access to prevent unauthorized uses.	Until the concentration of hazardous substances in the soil and the groundwater have been reduced to levels that allow for unlimited exposure and unrestricted use.	Erected by the Army and maintained by the City of Memphis.	Site Inspection – Annual. The Army will verify adherence to the LUC. LUC verification Every 5 years as part of the required remedy review under CERCLA.	The golf course area located in FU2.

Notes

CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act

DRC = Depot Redevelopment Corporation of Memphis and Shelby County

EPP = Environmental Protection Provision

FU = Functional Unit

LUC = Land Use Control

MI = Main Installation [of the Memphis Depot]

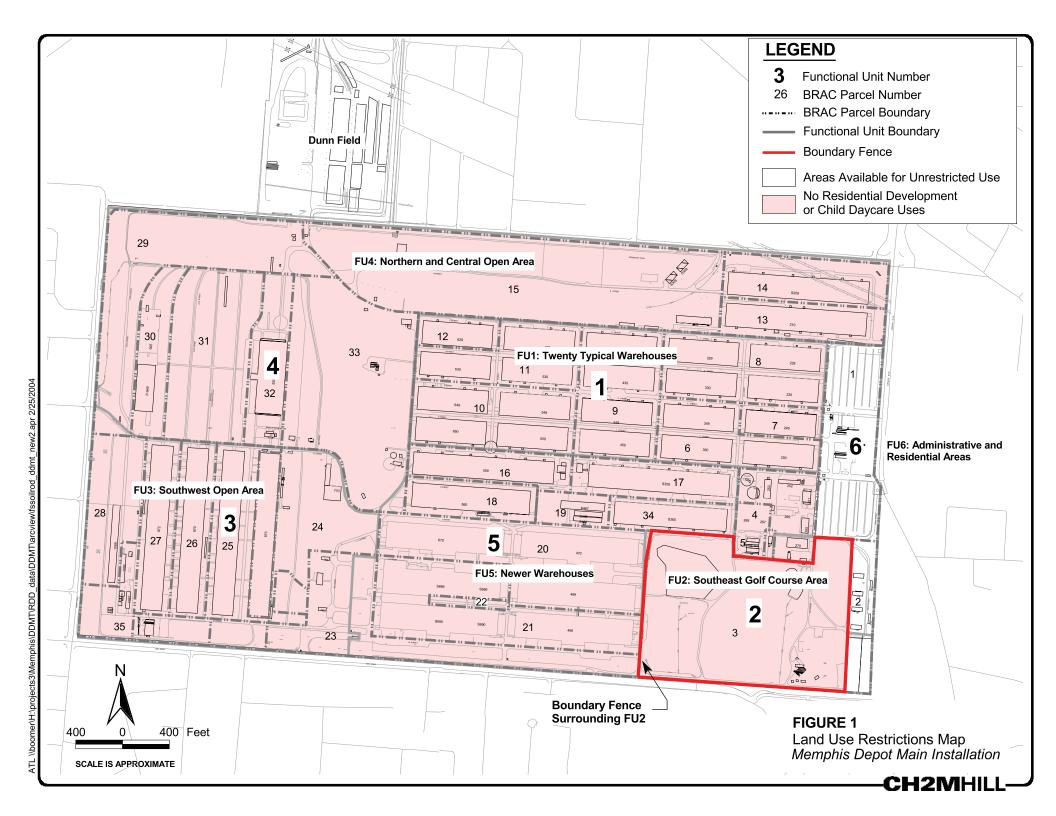
MSCHD = Memphis Shelby County Division of Health Services

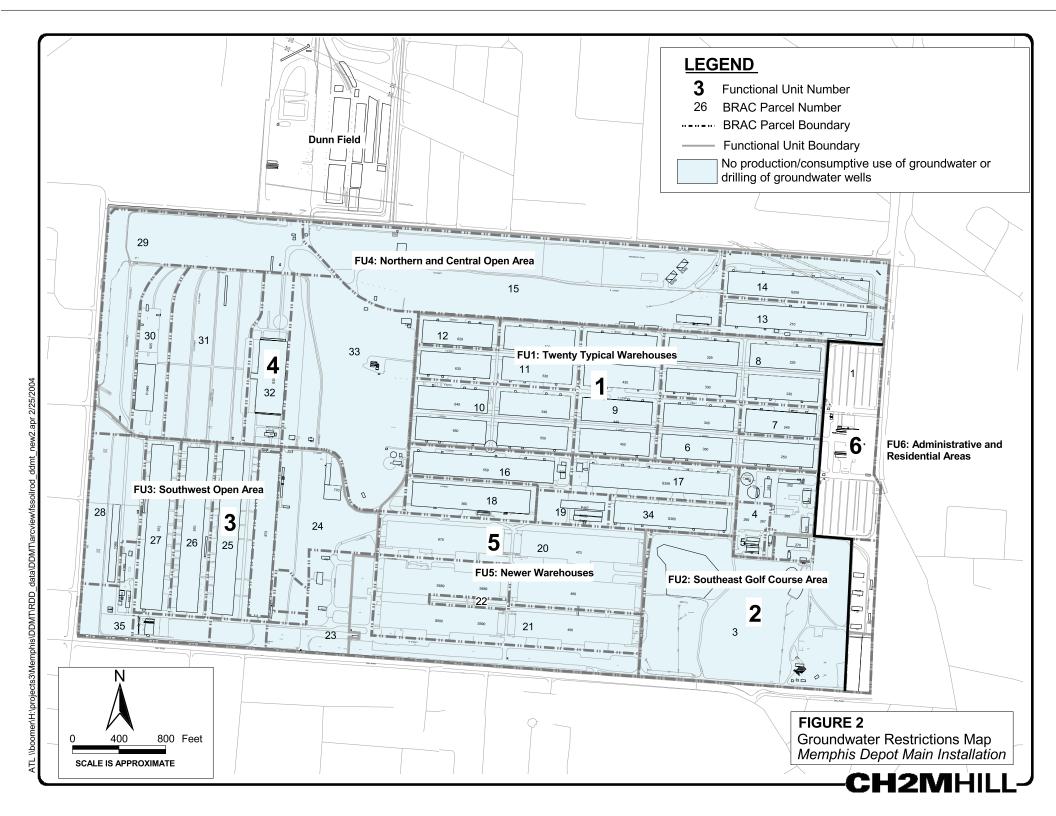
TDEC = Tennessee Department of Environment and Conservation

¹ Prior to transfer of any Depot property, the Army or its representatives will perform the monitoring. After transfer, the Army may arrange to have TDEC, the City of Memphis, or some independent third party representative conduct any required monitoring. [See Section 5 below].

Figures 1 and 2

Land Use and Groundwater Use Restrictions From Main Installation Land Use Control Implementation Plan





Defense Depot Memphis, Tennessee

Dunn Field

Annual Site Inspection Form

Pursuant to the Land Use Control Implementation Plan (LUCIP) dated September 2008 (Appendix A of Rev. 1 Final Dunn Field Off-Depot Groundwater Remedial Design dated September 2008) for the former Defense Depot Memphis, Tennessee – Dunn Field (Memphis Depot), an inspection of property was conducted by HDR, Inc. on 30 June 2016.

A summary of the land use restrictions is as follows:

- No residential land use or other child-occupied facilities including daycare in the Disposal Area/western portion of Dunn Field.
- No production/consumptive use of groundwater or drilling groundwater wells in contaminated groundwater associated with Dunn Field.
- Table 1 Summary of Land Use Controls and Monitoring Requirements, Figure 1 Land Use Restrictions and Figure 2 Groundwater Use Restrictions from the Dunn Field LUCIP are attached.

Verification that land use restrictions are being accomplished and LUCs remain effective

- Verify that no residential housing/development or child daycare activities are occurring in the Disposal Area/western portion of Dunn Field.
 - O Visual inspection conducted on 30 June 2016. No structures or other development are present in the Disposal Area/western portion of Dunn Field. Access to Dunn Field is controlled by perimeter fence with locked gates. The Dunn Field fence was observed to be in good condition with no required repairs identified.
- Verify that no groundwater wells have been installed at the site (except for wells that
 were done as part of the remedy) and that no production/consumptive use of
 groundwater is occurring.
 - o Visual inspection conducted on 30 June 2016. No deficiencies identified.
 - o Interviewed Mr. Greg Parker, Memphis/Shelby County Health Department Pollution Control Division, Water Quality Control, on 28 June 2016. Mr. Parker confirmed that no permits have been issued for construction of consumptive use/production groundwater wells at Dunn Field or within contaminated groundwater down gradient of Dunn Field.

Description of any deficiency or violation of the land use restrictions

No deficiencies or violations identified.

Description of any proposed measures or corrective actions taken to remedy the deficiency or violation

No proposed measures or corrective actions are necessary.

Description of whether the use restrictions and controls referenced in Column 1 of Table 1 were communicated in the deed(s)

No deed(s) issued to date.

Describe whether the owners and state and local agencies were notified of the use restrictions and controls affecting the property

State environmental agencies notified of use restrictions and controls via review/approval of the Rev. 1 Final Off-Depot Groundwater Remedial Design. The Notice of Land Use Restrictions was recorded on Thursday, 11 June 2009, in the Register of Deeds, Shelby County, TN; Document No. 09069308.

Certification Statement

I, the undersigned, do document that the inspection was performed as indicated above, and that the above information is true and correct to the best of my knowledge, information, and belief.

Date: 03 August 2016

Name/Title: Todd Calhoun/Project Manager

Organization: Trinity Analysis & Development Corp.

Signature:

Completed annual inspection forms shall be sent within thirty (30) days of the inspection to:

HQ Department of the Army Office of the Chief of Staff for Installation Management Attn: BRAC Division (DAIM-ODB) (Carolyn Jones, PM) 2530 Crystal Drive (Taylor Bldg), Room 5140E Arlington, VA 22202-3940

U. S. Environmental Protection Agency, Region 4 Carol Monell, Chief Restoration & Sustainability Branch, Superfund Division 61 Forsyth Street, SW Atlanta, GA 30303

Tennessee Department of Environment and Conservation Division of Remediation Memphis Field Office Attn: Jordan English 8383 Wolf Lake Drive Bartlett, TN 38133-4199

Table 1

Summary of Land Use Controls and Monitoring Requirements From Dunn Field Land Use Control Implementation Plan

TABLE 1 Summary of Land Use Controls and Monitoring Requirements Dunn Field - Memphis Depot, Tennessee

Type of control 1. Deed and/or Lease Restrictions A. Land use B. Groundwater	Purposes of control A. Prevent residential use or other child-occupied facilities (including daycare) B. Prevent production/ consumptive use of groundwater or drilling of groundwater wells.	Duration Until the concentration of hazardous substances in the soil and the groundwater have been reduced to levels that allow for unlimited exposure and unrestricted use.	Implementation Drafted by Army property disposal agent Deed recorded at the Shelby County Register of Deeds office.	Monitoring Frequency/Responsibility¹ Site Inspection/ LUC verification Every 5 years as part of the required remedy review under CERCLA. The Army will verify information properly recorded at Shelby County Register of Deeds office(s). Groundwater well verification – No less than annually the DLA or the Army (or its authorized representative) will conduct field inspection to ensure no production/consumptive use well(s) have been installed.	Affected area A. The Disposal Area/western portion of Dunn Field B. The Disposal Area/western portion and the northern portion of the Northeast Open Area of Dunn Field.
Notice of Land Use Restriction A. Land Use B. Groundwater	A. Prevent residential use or other child-occupied facilities (including daycare) B. Prevent production/ consumptive uses of groundwater or drilling of groundwater wells.	Until the concentration of hazardous substances in the soil and the groundwater have been reduced to levels that allow for unlimited exposure and unrestricted use.	Drafted by Army property disposal agent in accordance with Tennessee law and recorded at the Shelby County Register of Deeds office.	Site Inspection/ LUC verification Every 5 years as part of the required remedy review under CERCLA . The Army will verify information properly recorded at Shelby County Register of Deeds office(s). Groundwater well verification – No less than annually the DLA or the Army (or its authorized representative) will conduct field inspection to ensure no production/consumptive use well(s) have been installed.	A. The Disposal Area/western portion of Dunn Field B. The Disposal Area/western portion and the northern portion of the Northeast Open Area of Dunn Field.
3. Zoning Restrictions	Allow only certain uses of the property per designation as Light Industrial zoning district. Not effective at preventing child-occupied uses including daycare, nursery school or schools K through 12.	Until zoning district designation changes.	Zoning districts designated by City of Memphis and Shelby County LUC Board.	Site Inspection/ LUC verification Every 5 years as part of the required remedy review under CERCLA. The Army will verify with the City of Memphis and Shelby County the current zoning designation.	All of the Dunn Field property (except the northeast area which has been sold to a private owner).

TABLE 1 Summary of Land Use Controls and Monitoring Requirements Dunn Field - Memphis Depot, Tennessee

Type of control	Purposes of control	Duration	Implementation	Monitoring Frequency/Responsibility ¹	Affected area
Groundwater Well Restrictions	Prohibit installation of drinking water well within half-mile of the site and the offsite contaminated groundwater.	Until the site is no longer a Federal Superfund site, or MSCHD determines that the drilling of a well does not pose a threat to a local aquifer.	Groundwater Well Construction Code administered by MSCHD, Water Quality Branch.	Site Inspection/ LUC verification Every 5 years as part of the required remedy review under CERCLA. The Army will verify with the MSCHD on the implementation of its regulation.	A. The Disposal Area/western portion and the northern portion of the Northeast Open Area of Dunn Field.
				Groundwater well verification – No less than annually the DLA or the Army (or its authorized representative) will conduct field inspection to ensure no production/consumptive use well(s) have been installed.	
5. Fencing	Restrict public access to prevent unauthorized uses while the site is not regularly occupied.	Until transfer and the site is occupied on a regular basis, pending approval by the Army, EPA and TDEC.	Erected by the Army and is maintained by DLA prior to transfer.	Site Inspection/ LUC verification Every 5 years as part of the required remedy review under CERCLA . The Army will verify that the fencing while present is in place and is being maintained,	All of the Dunn Field property (except the northeast area, which has been sold to a private owner).
6. Protocol	Restriction of groundwater use and denial of installation of groundwater wells within the site.	The Protocol will terminate and be superseded by the deed restriction upon property transference.	90 days after approval of the LUCIP.	Protocol will be provided to all personnel that are assigned to work on Dunn Field.	All of the Dunn Field property (except the northeast area, which has been sold to a private owner).

Notes

CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act

DLA = Defense Logistics Agency

EPA = US Environmental Protection Agency, Region 4

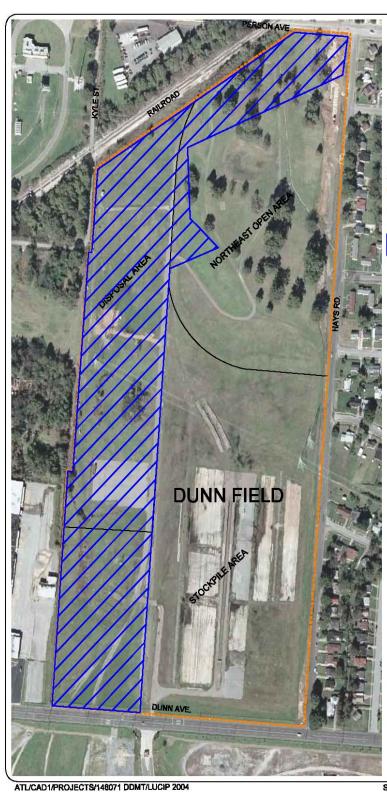
LUC = Land Use Control

MSCHD = Memphis Shelby County Division of Health Services TDEC = Tennessee Department of Environment and Conservation

¹ Prior to transfer of any Memphis Depot property, the DLA or the Army (or its representatives) will perform the monitoring. After transfer, the Army may arrange to have TDEC, the City of Memphis, or some independent third party representative conduct any required monitoring. [See Section 5 below].

Figures 1 and 2

Land Use and Groundwater Use Restrictions From Dunn Field Land Use Control Implementation Plan





LEGEND

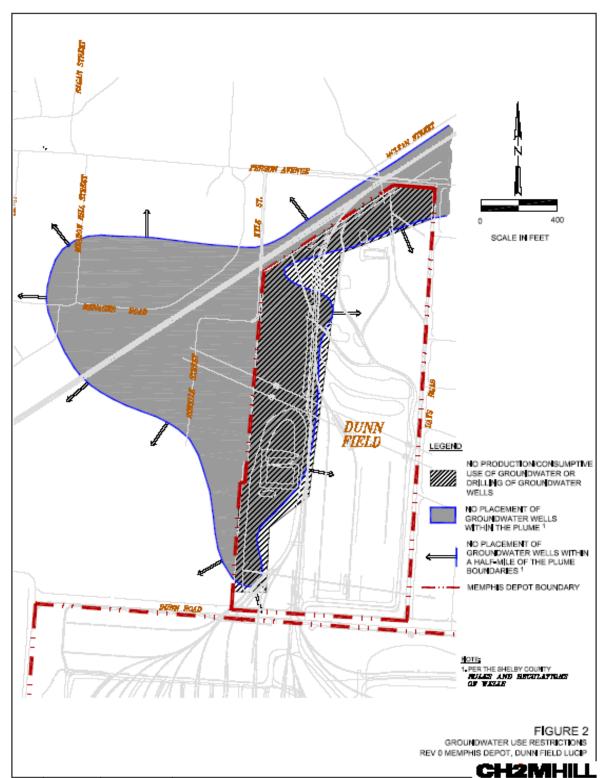
-- DUNN FIELD PERIMETER

FORMER EXPOSURE UNIT BOUNDARIES

LAND USE CONTROL BOUNDARY (NO RESIDENTIAL DEVELOPMENT OR CHILD DAYCARE USES)

FIGURE 1 **DUNN FIELD LAND USE** RESTRICTIONS
Rev. 2 Memphis Depot Dunn Field LUCIP

SEPT 2008 CH2MHILL



ATL/PROJECTS /148071 DDMT/LUCIP 2004

Regulatory Agency Approval Letters



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

October 15, 2016

<u>UPS NEXT DAY AIR</u> RETURN RECEIPT REQUESTED

Ms. Carolyn Jones Assistant Chief of Staff for Installation Management Base Realignment and Closure Division (ACSIM-ODB) 2530 Crystal Drive (Taylor Building), Room 5000 Arlington, Virginia 22202-3940

Dear Ms. Jones:

The U.S. Environmental Protection Agency (EPA) has received and reviewed the Department of Army, Defense Depot of Memphis, Tennessee August 2016 Annual Land Use Control (LUC) Inspection Reports for the Main Installation and the Dunn Field.

EPA approves the above mentioned reports. Should you have any questions or concerns, please feel free to call me at on my cell number 404-229-9500.

Sincerely,

Diedre Lloyd

Remedial Project Manager

Restoration & Sustainability Branch

Science Lloyd: f.

Superfund Division

cc: Ms. Carolyn Jones, (Signed Original), United Parcel Service, Return Receipt

Mr. Jamie A. Woods, PG, Tennessee, Department of Environment and Conservation, Memphis Environmental Field Office, 8383 Wolf Lake Drive Bartlett, TN 38133-4119

Ms. Joan Hutton, CALIBRE, 3898 Mountain View Road, Kennesaw, GA 30152

Mr. Thomas Holmes, HDR Environmental, P.O. Box 728, Highlands, NC 28741



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION MEMPHIS ENVIRONMENTAL FIELD OFFICE

8383 WOLF LAKE DRIVE BARTLETT, TN 38133-4119 PHONE (901) 371-3000 STATEWIDE 1-888-891-8332 FAX (901) 371-3170

September 13, 2016

Carolyn Jones
Program Manager
Office of the Chief of Staff for Installation Management
Attn: BRAC Division (DAIM-ODB)
2530 Crystal Drive (Taylor Bldg.), Room 5000
Arlington, VA 22202-3940

Subject:

2016 LUCIP- Main Installation & Dunn Field

Defense Depot Memphis, Tennessee

TDoR ID # 79-736

EPA ID # TN 4210020570

Ms. Jones,

TDEC-DoR has reviewed the **2016 LUCIP** completed for Main Installation & Dunn Field, and approves of the document's contents. If there are questions or concerns, please contact me at (901) 371-3041 or at jamie.woods@tn.gov.

Regards,

Jamie A. Woods, P.G.

Project Manager

Division of Remediation

Memphis Environmental Field Office

cc:

Todd Calhoun (Trinity)
Thomas C. Holmes (HDRInc)
Diedre Lloyd (EPA-PM) Joan Hutton (CALIBRE)

TDoR NCO: file 79-736

TDoR MEFO: file 79-736