File: 541.460.000n M.D.



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 1049

1049 1 File: M.D. 212.760.000 b

FINDING OF SUITABILITY TO TRANSFER (FOST) #6

DEFENSE DISTRIBUTION DEPOT MEMPHIS, TENNESSEE

Subparcels 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, 4.12, 4.13, 5.1, 5.2, 23.5, 23.9, 23.11, 24.1, 24.2, 24.3, 25.1, 25.2, 26.1, 26.2, 27.1, 27.2, 28.1, 28.2, 29.1, 29.2, 29.3, 30.1, 30.2, 30.3, 30.4, 30.5, 31.1, 32.1, 32.2, 32.3, 33.5, 33.6, 33.8, 33.9, 35.1, 35.2, 35.3, 35.4, 35.5

August 2010

FINDING OF SUITABILITY TO TRANSFER (FOST) #6

Defense Distribution Depot Memphis, Tennessee

Subparcels 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, 4.12, 4.13, 5.1, 5.2, 23.5, 23.9, 23.11, 24.1, 24.2, 24.3, 25.1, 25.2, 26.1, 26.2, 27.1, 27.2, 28.1, 28.2, 29.1, 29.2, 29.3, 30.1, 30.2, 30.3, 30.4, 30.5, 31.1, 32.1, 32.2, 32.3, 33.5, 33.6, 33.8, 33.9, 35.1, 35.2, 35.3, 35.4, 35.5

August 2010

1. PURPOSE

The purpose of this Finding of Suitability to Transfer (FOST) is to document the environmental suitability of certain parcels or property (the Property) on the Main Installation (MI) at Defense Distribution Depot Memphis, Tennessee (DDMT) for transfer via an economic benefit conveyance to the Depot Redevelopment Corporation of Memphis and Shelby County consistent with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120(h) and Department of Defense (DoD) policy. In addition, the FOST includes the CERCLA Notice, Covenant, and Access Provisions and other Deed Provisions (Enclosure 6) and the Environmental Protection Provisions (EPPs) (Enclosure 7) necessary to protect human health or the environment after such transfer.

2. PROPERTY DESCRIPTION

The Property consists of approximately 223 acres, which includes 28 buildings and approximately 163 acres of undeveloped land. The Property was previously used as industrial/commercial/hazardous materials storage and distribution. The Property is intended to be transferred as light industrial property within the Memphis Depot Business Park and is consistent with the intended reuse of the Property as set forth in the Memphis Depot Redevelopment Plan (The Pathfinders, 1997). A site map of the MI is attached (Enclosure 1-1).

3. Environmental Documentation

A determination of the environmental condition of the Property was made based upon the Ordnance and Explosive Waste Chemical Warfare Materiels Archives Search Report for Memphis Defense Depot – Findings (U.S. Army Corps of Engineers (Corps) – St. Louis, 1995a), Ordnance and Explosive Waste Chemical Warfare Materiels Archives Search Report for Memphis Defense Depot – Conclusions and Recommendations (U.S. Army Corps of Engineers – St. Louis, 1995b), Environmental Baseline Survey (Woodward-Clyde, 1996), Main Installation Record of Decision (CH2M Hill, 2001), BRAC Cleanup Plan Version 13 (HDR|e²M, 2009), and Main Installation Interim Remedial Action Completion Report, Rev. 1 (MI IRACR) (HDR|e²M, 2010a). The information provided is a result of a complete search of agency files during the development of these environmental surveys.

A list of documents providing information on environmental conditions of the Property is attached (Enclosure 2).

4. Environmental Condition of Property

The DOD Environmental Condition of Property (ECP) category for the Property is ECP Category 4. A list of the subparcels included in this FOST is provided on Table 1 (Enclosure 3).

Table 1 also includes sites of potential environmental impact identified by the the Defense Site Environmental Restoration Tracking System (DSERTS) site number. DSERTS is used by the Defense Logistics Agency (DLA); Department of the Army has implemented an updated database for tracking environmental liabilities, Army Environmental Database-Restoration (AEDB-R), which does not include DSERTS listings.

A summary of the ECP categories for specific buildings, parcels, or operable units and the ECP category definition is provided in Table 1 – Description of Property (Enclosure 3). The Environmental Condition of Property map is attached (Enclosure 1-2).

4.1. Environmental Remediation Sites

A list of the 32 remediation sites located on the Property is provided below. These are identified by the DSERTS site number and the subparcel number(s) is provided in parentheses.

- Site 27 Former Recoupment Area, Building 873 (24.1, 25.1)
- Site 28 Recoupment Area, Building 865 (32.3)
- Site 29 Former Underground Waste Oil Storage Tank (35.2)
- Site 30 Spray Paint Booths (4.4, 24.3, 35.3)
- Site 31 Former Spray Paint Booth, Building 1087 (35.4)
- Site 33 Sandblasting Waste Drum Storage Area (35.4)
- Site 32 Sandblasting Waste Accumulation Area (35.5)
- Site 34 Underground Storage Tanks at Building 770 (24.3)
- Site 40 Safety Kleen Units (24.3)
- Site 41 Satellite Drum Accumulation Area (4.4, 24.3)
- Site 42 Former PCP Dip Vat Area (33.9)
- Site 43 Former Underground PCP Tank Area (33.9)
- Site 44 Former Wastewater Treatment Unit (33.6)
- Site 45 Former Contaminated Soil Staging Area (33.9)
- Site 46 Pallet Drying Area (33.9)
- Site 47 Former Contaminated Soil Drum Storage Area (33.9)
- Site 48 Former PCB Transformer Storage Area (5.2)
- Site 53 X25 Flammable Solvents Storage Area near Building 925 (30.2)
- Site 56 West Stormwater Drainage Ditch (29.3)
- Site 58 Pesticides/Herbicides Pad 267 (4.9)
- Site 59 Pesticides/Cleaners Building 273 (4.10)
- Site 66 POL Building 253 Demolished 1999 (4.11)
- Site 67 MOGAS Building 257 Demolished 1999 (4.7)
- Site 68 POL Building 263 (4.8)
- Site 70 POL, Various Chemical Leaks, Railroad Tracks 1 6 (multiple)
- Site 71 Herbicides, All Railroad Tracks (multiple)

- Site 73 2,4 Dichlorophenoxy Acetic Acid, All Grassed Areas (multiple)
- Site 83 Disposal of Dried Paint Residues South of Building 949 (30.5)
- Site 84 Flammables, Solvents, Waste Oil, etc., Building 972 (27.2)
- Site 87 DDT, banned pesticides, Building 1084 Demolished 2000 (35.2)
- Site 88 POL, Building 1085 Demolished 2000 (35.2)
- Site 89 Acids, Building 1089 (28.2)

DDMT was developed as a military facility in the early 1940s to provide stock control, material storage, and maintenance services for the U.S. Army. Storage and distribution activities continued until DDMT closed in September 1997. DDMT covered approximately 662 acres and had two components: the MI (597 acres), which included open storage areas, warehouses, military family housing, and outdoor recreational areas; and Dunn Field (65 acres), which included former mineral storage and waste disposal areas. The Property consists of approximately 214 acres on the west side of the MI and 9 acres on the east side of the MI.

On 28 September 1990, the U.S. Environmental Protection Agency (USEPA) and Tennessee Department of Environment and Conservation (TDEC) issued DDMT a Resource Conservation and Recovery Act (RCRA) Part B permit for the storage of hazardous waste (No. TN 4210020570). Subsequent to issuing the RCRA permit, and in accordance with Section 120(d)(2) of CERCLA, USEPA prepared a final Hazard Ranking System Scoring Package for the facility. On 14 October 1992, USEPA added DDMT to the NPL (57 Federal Register 47180 No. 199). On 6 March 1995, USEPA, TDEC, and DLA entered into Federal Facilities Agreement Between USEPA Region IV, TDEC, and Defense Logistics Agency at Defense Distribution Depot Memphis, Tennessee (FFA) (USEPA, 1995) under CERCLA, Section 120, and RCRA, Sections 3008(h) and 3004(u) and (v).

To assist investigations at the Depot, representatives of DLA, USEPA, and TDEC divided the facility into four potential Operable Units (OUs). Dunn Field, located north of the MI and identified as OU-1, is the only known and documented burial area on the Depot. The MI is divided into three OUs (2 through 4). OU-2 is located in the southwestern quadrant of the MI area of the Depot and is characterized as an industrial area where maintenance and repair activities took place. OU-3 is located in the southeastern quadrant of the MI area and contains the entire southeastern watershed and golf course. OU-4 is located in the north-central section of the MI area where material storage took place. The MI was divided into seven Functional Units (FUs) based on similar historical use for conducting baseline risk assessments (FUs 1 through 6, with groundwater being FU-7) The OUs and FUs are shown on Enclosure 1-3. The Depot Redevelopment Corporation (DRC) assisted DDMT in further subdividing the Depot property into parcels and then parcels into subparcels to delineate buildings and CERCLA sites.

Beginning in 1982, DDMT installed groundwater monitoring wells to evaluate the impact of past hazardous substance handling operations on groundwater at the MI. As of 1 November 2008, DDMT has 135 monitoring wells on and off the MI to define the extent of groundwater contamination and to define the hydrogeology of the area.

In January 2000, DLA submitted the final MI Remedial Investigation (RI) Report, which included the risk assessment (CH2M Hill, 2000a). The constituents of concern (COCs) in groundwater identified at the MI are carbon tetrachloride (CT), tetrachloroethene (PCE), and trichloroethene (TCE). Although these constituents occur in groundwater above the Safe Drinking Water Act maximum contaminant levels, they do not present significant current health risks

because the fluvial aquifer is not a source of drinking water in the area and the water table depth of approximately 80 feet below land surface prevents surface impacts.

The COCs in soil at the MI are lead, arsenic, and dieldrin. Lead, dieldrin, and arsenic levels in surface soil in some areas present unacceptable risks for hypothetical future residents. Lead was above the industrial health protective level in one area (adjacent to the south end of Building 949). In 2000, DDMT completed a removal action at the old paint shop and maintenance area (Buildings 1084, 1085, 1086, 1087, 1088, 1089, 1090, and 1091) to bring lead levels in soil to within acceptable risk-based concentrations for industrial land use.

During development of the MI Record of Decision (ROD), DLA elected to conduct a removal action of lead-contaminated soil around the south end of Building 949 prior to finalization of the MI ROD, which contains an explanation of significant difference regarding the removal action. The MI ROD became effective on September 6, 2001 (CH2M Hill, 2001).

The selected remedy in the MI ROD included enhanced bioremediation treatment (EBT) in the most contaminated part of the plume, long-term monitoring (LTM) to document changes in concentrations and to detect potential migration throughout the plumes, and land use controls (LUCs). The Main Installation Final Remedial Design (CH2MHILL, 2004) was approved by the USEPA in August 2004. Construction of the EBT components were completed in August 2006 and injections of sodium lactate solution and performance monitoring was conducted from September 2006 through March 2009. Chlorinated volatile organic compound (CVOC) concentrations for parent compounds (PCE, TCE, CT and chloroform) were reduced over 90 percent in injection wells and over 80 percent in monitoring wells at locations with baseline concentrations above 100 micrograms per liter (µg/L).

In 2008, an investigation was performed to identify potential source areas for observed groundwater plumes. While the investigation did identify potential sources for each of the groundwater plumes, the low CVOC concentrations did not warrant remedial action. Groundwater modeling, with conservative assumptions for total CVOC mass and transport, was then performed to investigate potential water quality impacts to the Memphis Sand Aquifer. The groundwater modeling and trend analysis did not support the need for active groundwater treatment. The Main Installation Interim Remedial Action Completion Report, Rev. 1 (HDR|e²M, 2010a), with Operating Properly and Successfully (OPS) determination, was submitted to the Base Realignment and Closure (BRAC) Cleanup Team in February 2010. The OPS determination was approved by USEPA on 15 March 2010 and the MI IRACR was approved by USEPA on March 23, 2010.

All environmental soil and groundwater remediation activities on the Property have been completed or are in place and operating properly and successfully. The Property was not remediated to levels suitable for unrestricted use. The deed will include the following land use restrictions:

- No residential land use or other child-occupied facilities, including daycare on the MI;
- No production/consumptive use of groundwater or drilling groundwater wells (excluding monitoring or underground injection wells installed as part of the CERCLA remedial action);
- No digging in soil material 10 feet below the land surface due to elevated PCP soil concentrations at the Former PCP Dip Vat Area (Site 42) and the Former Underground PCP Tank Area (Site 43).

See Main Installation Record of Decision (CH2M Hill, 2001), Summary Report, On-Site Remedial Activities at the Defense Depot Memphis (O.H. Materials, 1986), Post Removal Report Cafeteria Building (OHM, 1999), Remediation Report Removal Action at Old Paint Shop & Maintenance Area - Parcels 35 & 28 (Jacobs/Sverdrup Inc., 2000), Remediation Report Removal Action at Building 949 (Jacobs Engineering Group, 2002), and the Main Installation Notice of Land Use Restrictions filed with the City of Memphis/Shelby County Register of Deeds on January 26, 2005, for additional information. A summary of the environmental remediation sites is provided in Table 2 – Notification of Hazardous Substance Storage, Release, or Disposal (Enclosure 4). The response action locations are shown on Enclosure 1-3.

4.2. STORAGE, RELEASE, OR DISPOSAL OF HAZARDOUS SUBSTANCES

Hazardous substances were stored for one year or more and released or disposed of on the Property in excess of reportable quantities specified in 40 CFR Part 373. All hazardous substance storage operations have been terminated on the Property. Hazardous substances were released in excess of the 40 CFR 373 reportable quantities at the following locations (subparcel numbers in parenthesis):

- Site 42 Former PCP Dip Vat Area (33.9)
- Site 43 Former Underground PCP Tank Area (33.9)
- Site 48 Former PCB Transformer Storage Area (5.2)
- Site 53 X25 Flammable Solvents Storage Area near Building 925 (30.2)
- Building 770 (24.3)
- Building 873 (25.1)

The release or disposal of these hazardous substances was remediated at the time of the release or as part of the Installation Restoration Program (IRP). See Section 4.1 Environmental Remediation Sites for additional information. A summary of the buildings or areas in which hazardous substance activities occurred is provided in Table 2 – Notification of Hazardous Substance Storage, Release, or Disposal (Enclosure 4). A map showing the response action locations is attached (Enclosure 1-3). The CERCLA 120(h)(3) Notice, Description, and Covenant (Enclosure 6) will be included in the Deed.

4.3. PETROLEUM AND PETROLEUM PRODUCTS

4.3.1. Underground and Above-Ground Storage Tanks (UST/AST)

<u>Current UST/AST Sites</u> - There are no underground or above-ground petroleum storage tanks (USTs/ASTs) on the Property.

Former UST/AST Sites - There were 16 USTs and 5 ASTs on the Property that have been removed and two USTs (Subparcels 25.2 and 33.9) that were closed in place. Releases of petroleum products were remediated at the time of the release, as part of UST/AST closure or as part of the IRP. There were no documented petroleum releases from USTs/ASTs in excess of 55 gallons. See Environmental Baseline Survey Report (Woodward-Clyde, 1996), Remediation Report Removal Action at Old Paint Shop & Maintenance Area - Parcels 35 & 28 (Jacobs/Sverdrup Inc, 2000), Main Installation Record of Decision (CH2M Hill, 2001), and BRAC Cleanup Plan Version 13 (HDR|e²M, 2009) for additional information.

A summary of the UST/AST petroleum product activities is provided in Table 3 – Notification of Petroleum Products Storage, Release, or Disposal (Enclosure 5).

4.3.2. Non-UST/AST Storage, Release, or Disposal of Petroleum Products

There was non-UST/AST storage of petroleum products in excess of 55 gallons for one year or more on the Property. The petroleum was used for the following types of activities: base vehicle maintenance and storage prior to shipment. All non-UST/AST petroleum product storage operations have been terminated on the Property. There was no evidence of petroleum releases in excess of 55 gallons as a result of these activities. A summary of the non-UST/AST petroleum activities is provided in Table 3 – Notification of Petroleum Products Storage, Release, or Disposal (Enclosure 5).

4.4. POLYCHLORINATED BIPHENYLS (PCB)

There is evidence of releases from the PCB-containing equipment at the following locations: Site 48 (5.2) and Building 737 (33.9). The PCBs were remediated at the time of the release or as part of the IRP. See the *Main Installation Record of Decision* (CH2M Hill, 2001) and the *Post Removal Report Cafeteria Building* (OHM, 1999) for additional information.

4.5. ASBESTOS

There is asbestos-containing material (ACM) in the following buildings:

- Gatehouse 9 (29.1): door and window putty, asphalt built-up roof and roof flashing; non-friable and in good condition.
- Building 260 (4.4): thermal system pipe insulation, thermal pipe joint insulation, cement panels, exterior window putty and 12 x 12 floor tile & mastic; non-friable and in good condition. 1997 Abatement: End of pipe insulation encapsulated.
- Building 265 (4.13): boiler/flue insulation, thermal system pipe insulation, thermal system pipe joint insulation, interior boiler door insulation, exterior window putty, 9 x 9 floor tile and mastic in break area and restrooms, 12 x 12 floor tile and mastic in center office area, and roof flashing; non-friable and in good condition. 1998
 Abatement: Encapsulated boiler insulation.
- Building 270 (4.2): 9 x 9 brown floor tile and mastic, and 12 x 12 brown floor tile mastic; non-friable and in good condition.
- Building 271(4.3): gypsum board leveling compound; non-friable and in good condition.
- Building 274 (5.2): 12 x 12 white vinyl floor tile mastic; non-friable and in good condition.
- Building 737 (33.9): cement asbestos shingle siding on exterior gables; non-friable and in good condition.
- Building 770 (24.3): thermal system straight run pipe insulation, thermal system pipe joint insulation, boiler/flue insulation, thermal system tank insulation, boilers rope gasket, 12 x 12 brown vinyl floor tile mastic in office areas, roof flashing, cement asbestos ceiling panels in first floor office restrooms; non-friable and in good condition. 1997 Abatement: Removed 338 linear feet (If) of 2-inch thermal system insulation, 90 If of 1/5-inch thermal system insulation and 25 If of 4-inch thermal system insulation. Encapsulated 120 If of 2-inch thermal system insulation, 70 If of 4-inch thermal

inch thermal system insulation, and 5 lf of 10-inch thermal system insulation. Encapsulated boiler insulation.

- Building 771 (24.3): cement asbestos shingle siding and interior wall board; nonfriable and in good condition.
- Building 801 (29.2): exterior window frame putty; non-friable and in good condition.
- Building 970 (26.2): asphalt built-up roofing and roof flashing; non-friable and in good condition.
- Building 972 (27.2): 12 x 12/9 x 9 (two layers) floor tiles in office and breakroom, 9 x 9 floor tile and mastic in Bay 5 office, 9 x 9 beige floor tile in Bay 5 office, cement asbestos board on ceiling and walls of Bay 6 shop area; non-friable and in good condition. 1998 Abatement: Removed approximately 1,900 square feet of damaged cement asbestos board and sprayed encapsulant over remaining boards.
- Building 1087 (35.4): thermal system duct insulation on top of paint booth; non-friable and in fair condition.
- Building 1090 (35.1): mastic/sealant coating roof bolts; non-friable and in good condition.
- Building 1091 (35.5): mastic/sealant coating roof bolts; non-friable and in good condition.

See Asbestos Identification Survey (The Pickering Firm, 1994) and BRAC Cleanup Plan Version 13 (HDR|e²M, December 2009) for additional information. The ACM does not currently pose a threat to human health or the environment because all friable asbestos that posed an unacceptable risk to human health has been removed or encapsulated. The deed will include an asbestos warning and covenant (Enclosure 7).

4.6. LEAD-BASED PAINT (LBP)

Based on the age of the buildings (constructed prior to 1978), the following buildings are presumed to contain lead-based paint (LBP): 9, 260, 263, 265, 270, 271, 272, 717, 720, 737, 756, 770, 771, 801, 970, 972, 1086, 1087, 1088, 1089, 1090 and 1091. The Property was not used for residential purposes and the transferee does not intend to use the Property for residential purposes in the future. See BRAC Cleanup Plan Version 13 (HDR|e²M, 2009) for additional information. The deed will include a lead-based paint warning and covenant (Enclosure 7).

4.7. RADIOLOGICAL MATERIALS

There is no evidence that radioactive material or sources were stored or used on the Property.

4.8. RADON

There were no radon surveys conducted on the Property.

4.9. MUNITIONS AND EXPLOSIVES OF CONCERN (MEC)

Based on a review of existing records and available information, there is no evidence that Munitions and Explosives of Concern (MEC) are present on the Property. In addition, there is no record of MEC being discovered on the Property and there is no record that munitions-related activities occurred. 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. §101(e)(5); (B) discarded military munitions (DMM), as defined in 10 U.S.C. §2710(e)(2); or (C) munitions constituents (e.g., TNT, RDX), as defined in 10 U.S.C. §2710(e)(3), present in high enough concentrations to pose an explosive hazard.

4.10. OTHER PROPERTY CONDITIONS

Other conditions also exist on the Property.

All grassed areas (Subparcels 4.5, 4.10, 5.1, 5.2, 23.11, 29.2, and 33.9) were sprayed with pesticides (dieldrin, DDT) and herbicides. All gravel areas (Subparcels 23.11, 24.1, 24.2, 25.2, 26.1, 27.1, 28.1, 29.2, 29.3, 30.2, 30.3, 30.5, 31.1, 32.1, 33.6, 33.9, 35.2, 35.4, 35.5) and all railroad tracks (Subparcels 24.2, 25.2, 26.1, 28.1, 29.2, 30.3, 31.1, 32.1, 33.9) were sprayed with pesticides (dieldrin, DDT), herbicides, and waste oil containing PCP. The railroad tracks and ballasts were removed from 1999 through 2001. These areas were investigated as part of the MI RI (CH2M Hill, 2000a):

- Site 70 POL/Various Chemical Leaks Railroad Tracks 1 6;
- Site 71 Herbicides, All Railroad Tracks; and
- Site 73 2,4-Dichlorophenoxyacetic acid, all grassed areas.

Existing records indicate releases in these areas did not exceed the 40 CFR Part 373 reportable quantities unless otherwise noted in Table 2 – Notification of Hazardous Substance Storage, Release, or Disposal (Enclosure 4).

To protect human health and the environment, the deed will include the following land use restrictions:

- No residential land use or other child-occupied facilities, including daycare on the MI;
- No production/consumptive use of groundwater or drilling groundwater wells (excluding monitoring or underground injection wells installed as part of the CERCLA remedial action);
- No digging in soil material 10 feet below the land surface due to elevated PCP soil concentrations at the Former PCP Dip Vat Area (Site 42) and the Former Underground PCP Tank Area (Site 43).

See Main Installation Record of Decision (CH2M Hill, 2001) and the Main Installation Notice of Land Use Restrictions filed with the City of Memphis/Shelby County Register of Deeds on January 26, 2005 for additional information. Although the Army may transfer responsibility for monitoring to another party, the Army shall retain ultimate responsibility for the remedy integrity.

5. ADJACENT PROPERTY CONDITIONS

With implementation of LUCs at the Main Installation, there are no conditions adjacent to the Property that present an unacceptable risk to human health and the environment.

6. Environmental Remediation Agreements

The following environmental orders/agreements are applicable to the Property: Federal Facilities Agreement between United States Environmental Protection Agency Region IV, Tennessee Department of Environment and Conservation, and United States Defense Logistics Agency at the Defense Distribution Depot Memphis (FFA, effective March 6, 1995), and Main Installation Record of Decision (CH2M Hill, 2001).

All remediation activities on the Property, required by such agreement or order, are completed or in place and operating properly and successfully (See Section 4.1 Environmental

Remediation Sites). The deed will include a provision reserving the Government's right to conduct remediation activities (Enclosure 6).

7. REGULATORY/PUBLIC COORDINATION

The USEPA, TDEC, and the public were notified of the initiation of this FOST. DLA' advertised the availability of the FOST for review and provided a public comment period from June 1 through June 30, 2010. No regulatory or public comments were received.

8. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE

The environmental impacts associated with the proposed transfer of the Property have been analyzed in accordance with the NEPA. The results of the initial analysis are documented in the Final Environmental Assessment for BRAC 95 Disposal and Reuse for Defense Distribution Depot Memphis, Tennessee (Tetra Tech, Inc., 1998). The analysis was reviewed to note the current status of remediation, verify continuing consistency with the 1998 EA, and determine whether additional NEPA analysis was warranted. The Finding of No Significant Impact was found to remain valid with respect to this proposed transfer as documented in Record of Environmental Consideration, Final Transfer of Property, Defense Distribution Depot Memphis, Tennessee (HDR|e²M, 2010b).

There were no encumbrances or conditions identified in the NEPA analysis as necessary to protect human health or the environmental.

9. FINDING OF SUITABILITY TO TRANSFER

Based on the above information, I conclude that 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, all DoD requirements to reach a finding of suitability to transfer have been met, subject to the terms and conditions set forth in the attached Environmental Protection Provisions that shall be included in the Deed for the Property. The Deed will also include the CERCLA 120(h)(3) Notice, Covenant, and Access Provisions and Other Deed Provisions. Finally, the hazardous substance notification (Table 2) shall be included in the Deed as required under CERCLA Section 120(h) and DoD FOST Guidance.

Thomas E. Lederle Industrial Branch Chief

Base Realignment and Closure Division

8 Enclo	osures	
Encl 1		Site Maps of Property
	1-1	Site Map of Property
	1-2	Environmental Condition of Property, Main Installation
	1-3	Unit Boundaries and Previous Response Actions
Encl 2		Environmental Documentation
Encl 3		Table 1 Description of Property
Encl 4		Table 2 Notification of Hazardous Substance Storage, Release, or Disposal
	4-1-1	lazardous Materials Stored at DDMT
	4-2 - F	Pesticides/Herbicides Inventory
Encl 5		Table 3 Notification of Petroleum Product Storage, Release, or Disposal
Encl 6		CERCLA Notice, Covenant, and Access Provisions and Other Deed Provisions
Encl 7		Environmental Protection Provisions

ENCLOSURE 1 SITE MAPS OF PROPERTY

13 Projection: NAD 1927 Staff Units: Feet Aerial Photo Date: 2006





SITE MAP OF PROPERTY Enclosure 1-1

FINDING OF SUITABILITY TO TRANSFER #6

MAIN INSTALLATION DEFENSE DEPOT MEMPHIS TENNESSEE

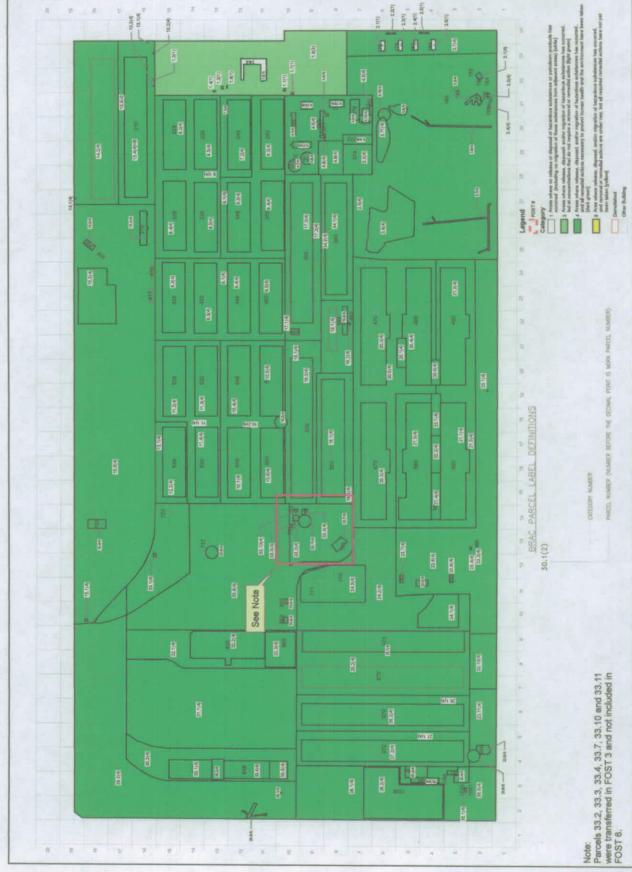


Enclosure 1-2

ENVIRONMENTAL
CONDITION OF
PROPERTY,
MAIN INSTALLATION
DEFENSE DEPOT
MEMPHIS TENNESSEE

MAIN INSTALLATION
DEFENSE

AMON INSTALLATION
DEFENSE



Selective 200 HJR COM Legend
Operable Units (OU-#)
Functional Unit Boundary (FU-#)
Areas Available for Unrestricted Use 0 250 500 1,000 MAIN INSTALLATION DEFENSE DEPOT MEMPHIS TENNESSEE UNIT BOUNDARIES
AND RESPONSE
ACTIONS FINDING OF SUITABILITY TO TRANSFER #6 Installation Location Memphis, Tennessee Scale in Feet Enclosure 1-3 Projection: NAD 1927 StatePit Units: Feet Housing Area Surface Soil Removal Action (1998) 11 9-03 H . FU-2 OUL3 Cafeteria (Bidg 274)
Surface Soil Removal
Action (1998) 23.5 BB FU-1 8118 Building 873 Hazardous Materials Recoupment (1985) Former PCP Dip Vat Soil Removal Action (1985) 8.8.3 DUNN AVENUE BALL ROA F 0 1 0 111 -P 3 00-1 BRAC Parcels 35 & 28 Surface Soil Removal Action (2000) B go 0 - OU-2 FU-3 Bldg. 949 Surface Soil Removal Action (2001)

1049

15

ENCLOSURE 2

ENVIRONMENTAL DOCUMENTATION

A.T. Kearney, Inc. 1990. RCRA Facilities Assessment Report of the Defense Depot Memphis, TN. Prepared for the U.S. Environmental Protection Agency.

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Chemical Systems Laboratory. 1981. Installation Assessment of Defense Depot Memphis, Memphis, Tennessee.

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HDR|e²M, Inc. 2009. BRAC Cleanup Plan Version 13, Revision 0.

HDR|e²M, Inc. 2010a. Main Installation Interim Remedial Action Completion Report, Rev 1.

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Jacobs Engineering Group. 2002. Remediation Report, Removal Action at Building 949.

Jacobs/Sverdrup Inc. 2000. Remediation Report, Removal Action in Parcels 35 and 28 (Old Paint Shop and Maintenance Area).

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. ENCLOSURE 3

TABLE 1 – DESCRIPTION OF PROPERTY

Property Description	Subparcel Designation	Condition Category	Remedial Actions
Building 252 – Physical Fitness Center Demolished in 1999.	4.1	4	The Main Installation (MI) Remedial Investigation (RI) Report indicated levels of several constituents exceeding BRAC Cleanup Team (BCT) screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
			Per MI Record of Decision (ROD) effective September 6, 2001, no further action was required other than land use controls (LUCs). LUCs were implemented via the Land Use Control Implementation Plan (LUCIP) portion of 2004 MI Remedial Design (RD) and submission of MI Notice of Land Use Restrictions in January 2005.
Building 270 - Administration	4.2	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs were implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Building 271 - Administration	4.3	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs were implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Building 260 – Maintenance Shop	4.4	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present
Site 30 (Paint Spray Booth)			unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
Site 41 (Satellite Drum Accumulation Area)			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs were implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Building 261 – Vehicle Storage and Maintenance and surrounding open land area in Parcel 4	4.5	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.

Property Description	Subparcel Designation	Condition Category	Remedial Actions
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Building 254 – Equipment and Oil Storage and open land area/UST field west of building Demolished in 1999.	4.6	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse. Per MI ROD effective September 6, 2001, no further action
Building 254 was used to store petroleum products, oils, lubricants and antifreeze.			was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Site 67 (Motor gasoline (MOGAS), Building 257) Building 257 – Gas Station	4.7	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
Building 256 – Pump House Buildings demolished in 1999.			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Site 68 (Petroleum, Oil, and Lubricants (POL) Building 263)	4.8	4	This building was fumigated. Air sampling conducted during the BRAC sampling effort indicated no human health hazards from fumigation.
Building 263 – Vehicle Grease Rack			The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Site 58 (Pesticides, Herbicides Pad 267)	4.9	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present
Pad 267 was a concrete slab from Building T267, the former pesticide shop used for storing and mixing of pesticides/herbicides. Demolished in 1987; area covered by an asphalt parking lot.			unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse. Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.

Property Description	Subparcel Designation	Condition Category	Remedial Actions
Site 59 (Pesticides, Cleaners Building 273) and the adjacent former putting green	4.10	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
Building 273 was a shed used for mixing golf course pesticides and herbicides.			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI
Site 73 (2,4 dichlorophenoxyacetic acid, all grassed areas)			Notice of Land Use Restrictions in January 2005.
Site 66 (POL Building 253)	4.11	4	The MI RI Report indicated levels of several constituents
Building 253 – Vehicle Maintenance Shop was used for storage and use of			exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
petroleum products and antifreeze.			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI
Demolished in 1999.	•		Notice of Land Use Restrictions in January 2005.
Site 40 (Safety Kleen Unit)			· ·
Building 251 - Thrift Shop. Demolished in 1999.	4.12	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Building 265 – Maintenance Shop	4.13	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Building 272 – Lumber Storage and surrounding open land area Site 73 (2,4	5.1	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
dichlorophenoxyacetic acid, all grassed areas)			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.

Property Description	Subparcel Designation	Condition Category	Remedial Actions
Building 274 – Post Restaurant and surrounding open land area	5.2	4	Non-time critical removal action completed in 1998. Approximately 400 cubic yards (cy³) of surface soil was removed due to PCB and dieldrin levels.
Building 274 was constructed after transformer storage ceased.			The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
Site 48 (Former Polychlorinated biphenyl (PCB) Transformer Storage Area)			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI
Site 73 (2,4 dichlorophenoxyacetic acid, all grassed areas)			Notice of Land Use Restrictions in January 2005.
Building 995 – Steel Storage and Handling	23.5	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Spill area outside Building 995	23.9	4	Spill occurred on asphalt road outside Building 995 and consisted of 10 gallons of gasoline that did not exceed the reportable quantity. The Spill Team responded, applied absorbent and disposed of the residue in accordance with federal, state and local regulations.
			The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Open land area surrounding Building 995 Site 73 (2,4 dichlorophenoxyacetic acid,	23.11	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
all grassed areas)			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Site 27 (Former	24.1	4	Pre-RI activities included recoup/repackaging of hazardous

Property Description	Subparcel Designation	Condition Category	Remedial Actions
Recoupment Area, Building 873) at southern end of open storage area X02 and at the southeast corner of Building 873 was used as a hazardous materials recoupment area (remove hazardous materials from damaged containers then repackage the materials) until 1988. Contains gravel areas that			materials at Site 27 completed in 1985. The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse. Per MI ROD effective September 6, 2001, no further action required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
were historically sprayed with pesticides, herbicides and waste oil containing pentachlorophenol (PCP).			
Open storage areas X02 and X03 were used for storage of POLs and flammable materials until 1988. The areas then became steel storage. Site 70 (POL, Various Chemical Leaks, railroad tracks 1,2,3,4,5 and 6) Site 71 (Herbicides, all railroad tracks) Contains gravel areas that were historically sprayed with pesticides, herbicides	24.2	4	The railroad tracks and ballasts were removed in 1999/2000. The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse. Per MI ROD effective September 6, 2001, no further action required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
and waste oil containing PCP. Buildings 770 – Vehicle Maintenance Shop and T771 – Public Toilet Building 770 stored hazardous materials (antifreeze, paint, solvents, Safety Kleen) and petroleum products. Site 34 (Underground Storage Tanks at Building 770) Site 30 (Paint Spray Booth)	24.3	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse. Per MI ROD effective September 6, 2001, no further action required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.

Property Description	Subparcel Designation	Condition Category	Remedial Actions
Site 40 (Safety Kleen Units)			
Site 41 (Satellite Drum Accumulation Area)			
Building 873 – Open Shed Warehouse stored hazardous materials such as chlorinated solvents, corrosives, petroleum, oils and lubricants. The southern end of the building was used as the hazardous materials recoupment area until 1988. Demolished in 2002. Site 27 (Former Recoupment Area, Building 873)	25.1	4	Pre-RI activities included recoup/repackaging of hazardous materials at Site 27 completed in 1985. The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse. Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Building 875 – Open Shed Warehouse/Heating Fuel Storage and surrounding open land area. Demolished in 2002. Site 70 (POL, Various Chemical Leaks, railroad tracks 1 - 6) Site 71 (Herbicides, all railroad tracks) Contains gravel areas that were historically sprayed with pesticides, herbicides and waste oil containing PCP.	25.2	4	The railroad tracks and ballasts were removed in 1999/2000. The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse. Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Open land area surrounding Building 970 Site 70 (POL, Various Chemical Leaks, railroad tracks 1 - 6) Site 71 (Herbicides, all railroad tracks) Contains gravel areas that were historically sprayed with pesticides, herbicides and waste oil containing PCP.	26.1	4	The railroad tracks and ballasts were removed in 1999/2000. The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse. Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.

Property Description	Subparcel Designation	Condition Category	Remedial Actions
Building 970 – Open Shed Warehouse Building 970 stored non- hazardous materials such as steel, rope, hardware, hose,	26.2	4	During the EBS visual inspection, an oil-fired generator that had leaked oil onto the concrete pad was observed at Section 6 of Building 970. This release was less than 55 gallons of petroleum products. Absorbent was applied and the residue disposed.
etc.			The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Open land area surrounding Building 972 Contains gravel areas that were historically sprayed	27.1	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
with pesticides, herbicides and waste oil containing PCP.			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Site 84 (Flammables, Solvents, Waste Oil, etc., Building 972) Building 972 – Open Shed	27.2	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
Warehouse once stored flammable materials, solvents and waste oil, but was converted to a closed building and stored and constructed wooden packing materials involving the use of petroleum products (oils and lubricants), paints and spray adhesives.			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Open storage area X04 used for the storage of steel and	28.1	4	The railroad tracks and ballasts were removed in 1999/2000.
PVC pipe Site 70 (POL, Various Chemical Leaks, railroad tracks 1 - 6)			The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
Site 71 (Herbicides, all railroad tracks)			Per MI ROD effective September 6, 2001, no further action was required other than LUCs,. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI

Property Description	Subparcel Designation	Condition Category	Remedial Actions
Contains gravel areas that were historically sprayed with pesticides, herbicides and waste oil containing PCP.			Notice of Land Use Restrictions in January 2005.
Site 89 (Acids, Building 1089) and surrounding open land area	28.2	4	Non-time critical removal action completed in 2000. Approximately 980 cy3 of surface and subsurface soil from near Buildings 1084, 1085, 1087, 1088, 1089 and 1090 was removed because metals and polycyclic aromatic
Building 1089 – Open Shed Warehouse used to store acids, paints and cleaning solvents.			hydrocarbons (PAH) levels exceeded industrial standards. Building 1089 was also decontaminated during the removal action by vacuuming to remove free dust and pressure washing.
Contains gravel areas that were historically sprayed with pesticides, herbicides and waste oil containing PCP.			The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Gate 9 Sentry Station	29.1	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
			Although EPA concurred via letter dated March 13, 1997 with the Community Environmental Response Facilitation Act (CERFA) letter report that designated this subparcel Category 1, the BCT concurred in 2002 to change this subparcel from Category 1 to Category 4 based on implementation of the LUCs.
Open storage areas X27 and X30, Buildings 801 –	29.2	4	The railroad tracks and ballasts were removed in 1999/2000.
Maintenance Shop, 802 – Waiting Shelter, and 804 – Loading Dock as well as the surrounding open land area extending to Dunn Road and			The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
to Perry Road. X27 and X30 used for steel	44		Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI

Property Description	Subparcel Designation	Condition Category	Remedial Actions
and PVC pipe storage.			Notice of Land Use Restrictions in January 2005.
Site 70 (POL, Various Chemical Leaks, railroad tracks 1 - 6)		:	
Site 71 (Herbicides, all railroad tracks)			
Site 73 (2,4 dichlorophenoxy acetic acid, all grassed areas)			
Site 56 (AOC G/West Stormwater Drainage Ditch)	29.3	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Building 925 – Special Purpose Warehouse was the Bulk Flammable Materials warehouse and stored flammable materials such as xylene, toluene, acetone, methyl ethyl ketone, methanol and ethanol. Prior to construction of Building 925 in 1994, this	30.1	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse. Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
area was a concrete-bermed open storage location (X25) for petroleum products and flammable materials.			
Spill Area between Buildings 925 and 949	30.2	4	In 1988, a fabric tension structure covering the X25 open storage area collapsed during heavy winds releasing approximately 327 gallons of flammable material (xylene,
Site 53 (X-25 Flammable Solvents Storage Area near Building 925)			toluene, and methyl ethyl ketone) that mixed with approximately 30,000 gallons of water into the concrete bermed area. The Memphis Fire Department Hazmat Team
Flammable materials were stored in 55-gallon drums within an earthen bermed area, which was later converted to a concrete			joined the Depot's Spill Team in cleaning up the spill. The material/water waste was pumped out of the bermed area and disposed of according to federal, state and local regulations.
bermed area.	,,,,		The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present

Property Description	Subparcel Designation	Condition Category	Remedial Actions
			unacceptable risks for residential reuse.
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Open land area surrounding Buildings 925 and 949,	30.3	4	The railroad tracks and ballasts were removed in 1999/2000.
excluding subparcels 30.1, 30.2, 30.4 and 30.5. Includes portions of open storage areas X23and X25 that were used to store a variety of			The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
materials including POLs and hazardous materials.			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the
Site 70 (POL, Various Chemical Leaks, railroad tracks 1 - 6)			LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Site 71 (Herbicides, all railroad tracks)			
Contains gravel areas that were historically sprayed with pesticides, herbicides and waste oil containing PCP.			
Building 949 – General Purpose Warehouse was used for short-term hazardous substance storage	30.4	4	Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
and may have been fumigated.			Although EPA concurred via letter dated October 20, 1998 with the CERFA letter report that designated this subparcel Category 1, the BCT concurred in 2002 to change this subparcel from Category 1 to Category 4 based on implementation of the LUCs.
Site 83 (Disposal of Dried Paint Residues south of Building 949) was an outdoors spray paint/sand blast area until the early 1980s.	30.5	4	During development of the MI ROD, DLA elected to conduct a removal action that was completed in 2001. Approximately 200 cy³ of surface and subsurface soil from near Building 949 was removed because lead levels exceeded industrial standards. The MI ROD contains an explanation of significant differences regarding the removal action decision.
	· · · · · · · · · · · · · · · · · · ·		Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.

Property Description	Subparcel Designation	Condition Category	Remedial Actions
Open storage areas X17, X19 and X21 and portions of X15 and X23.	31.1	4	The railroad tracks and ballasts were removed in 1999/2000.
These areas stored a variety of materials including POLs and hazardous materials. Records indicate that during			The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
the 1970s hazardous materials were recouped under a lean-to at the corner of 21st Street and E Street in the X21 area.			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Site 70 (POL, Various Chemical Leaks, railroad tracks 1 - 6)			
Site 71 (Herbicides, all railroad tracks)			
Contains gravel areas that were historically sprayed with pesticides, herbicides and waste oil containing PCP.			,
Open storage areas X13 and X15 to the west and north of Building 835 that were used to store a variety of	32.1	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
materials including POLs and hazardous materials.			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the
Site 70 (POL, Various Chemical Leaks, railroad tracks 1 - 6)		:	LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Site 71 (Herbicides, all railroad tracks)			
Contains gravel areas that were historically sprayed with pesticides, herbicides and waste oil containing PCP.			
Building 835 – Special Purpose Warehouse (Hazardous) stored hazardous materials	32.2	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
including reactives, oxidizers, corrosives, photo	,		Per MI ROD effective September 6, 2001, no further action

Property Description	Subparcel Designation	Condition Category	Remedial Actions
chemicals, pesticides and flammables.			was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Site 28 (Recoupment Area, Building 865) and surrounding open land area Building 865 – Special Purpose Warehouse (Recoupment) was building in 1988 to transfer hazardous substances/ wastes or petroleum products/wastes from damaged or leaking containers into undamaged containers. Contains gravel areas that were historically sprayed with pesticides, herbicides and waste oil containing PCP.	32.3	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse. Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Building 860 - Administration Demolished in 2002.	33.5	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Spill area west of Building 737 Site 44 (Former Waste Water Treatment Unit) was a temporary unit used to	33.6	4	Spill consisted of 50 gallons of mineral oil containing <1ppm of PCB that did not exceed the reportable quantity. The Spill Team responded, applied absorbent, excavated stained soil and disposed of all resident in accordance with federal, state and local regulations.
treat rainwater mixed with PCP-contaminated oil and rinse waters from decontamination during the			The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
soil removal of the PCP dip vat system in 1985.			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Building 863 – Loading/Operations	33.8	4	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present

Property Description	Subparcel Designation	Condition Category	Remedial Actions
Building contained a battery charging station.			unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
Demolished in 2002 Material handling equipment (forklifts) was also stored in the building.			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Open storage areas X05, X06, X07, X10 and X11, Building 737, and the open land area surrounding Buildings 737, 860 and 863 Hazardous substances and petroleum products were historically stored in open	33.9	4	Pre-RI activities included excavation of approximately 602 cy ³ of surface and subsurface soil as well as the underground piping system from the PCP dip vat area because of elevated levels of PCP. Soil with PCP concentrations greater than 200 ppb remained beneath the excavated area (10 feet below ground surface). The railroad tracks and ballasts were removed in 1999/2000.
storage areas X05, X06, X07, X10, X11 and X12. Transformers containing mineral oil (non-PCB and PCB containing) were also			The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
stored in open storage area X07. Site 42 (Former PCP Dip			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI
Vat Area)			Notice of Land Use Restrictions in January 2005.
Site 43 (Former Underground PCP Tank Area)		:	
Site 45 (Former Contaminated Soil Staging Area)			
Site 46 (Pallet Drying Area)			
Site 47 (Former Contaminated Soil Drum Storage Area)			
Site 70 (POL, Various Chemical Leaks, railroad tracks 1 - 6)			
Site 71 (Herbicides, all railroad tracks)			
Site 73 (2,4 dichlorophenoxyacetic acid, all grassed areas)			
Contains gravel areas that were historically sprayed			

Property Description	Subparcel Designation	Condition Category	Remedial Actions
with pesticides, herbicides and waste oil containing PCP.			
Building 1090 – Paint Storage Igloo stored paint thinner, lubricating oil, P-19 preservation oil, and corrosion preservation compound.	35.1	4	Non-time critical removal action completed in 2000. Approximately 980 cy³ of surface and subsurface soil from near Buildings 1084, 1085, 1087, 1088, 1089 and 1090 was removed because metals and PAH levels exceeded industrial standards During this action, the interior of Building 1090 was decontaminated by vacuuming to remove free dust and pressure washing.
		- - - - -	The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
			Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Building 1084 — Open Warehouse and surrounding open land area. Demolished in 2000. Site 29 (Former Underground Waste Oil Storage Tank) a UST associated with the grease	35.2	4	Non-time critical removal action completed in 2000. Approximately 980 cy3 of surface and subsurface soil from near Buildings 1084, 1085, 1087, 1088, 1089 and 1090 was removed because metals and PAH levels exceeded industrial standards. During this action, Buildings 1084 and 1085 were demolished. The hydraulic lift and the 1,000- gallon waste oil UST (Site 29) at Building 1085 were also removed. The MI RI Report indicated levels of several constituents
rack that was. Site 87 (DDT, banned pesticides, Building 1084)			exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse.
Site 88 (POL, Building 1085) an old concrete grease rack and storage area for POLs.			Per MI ROD effective September 6, 2001, EBT of fluvial aquifer groundwater to reduce CVOC levels, with long-term groundwater monitoring (LTM) and LUCs, were required. EBT began in 2006 and was completed in 2009.
Contains gravel areas that were historically sprayed with pesticides, herbicides and waste oil containing PCP.			LTM will continue until remedial action objectives (RAOs) achieved. LUCs implemented via LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Building 1086 – Care and Preservation Shop/Paint Booth contained a spray paint booth and stored hazardous materials from 1959 through 1983/1984.	35.3	4	Non-time critical removal action completed in 2000. Approximately 980 cy3 of surface and subsurface soil from near Buildings 1084, 1085, 1087, 1088, 1089 and 1090 was removed because metals and PAH levels exceeded industrial standards. During this action the interior of Building 1086 was decontaminated by vacuuming to

Property Description	Subparcel Designation	Condition Category	Remedial Actions
Site 30 (Paint Spray Booths)			remove free dust and pressure washing. The sump was also cleaned in 2000. The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse. Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Site 31 (Former Spray Paint Booth, Building 1087) and surrounding open land area Site 33 (Sandblasting Waste Drum Storage Area) consisted of an open-sided, metal roof shed with a gravel floor south of Building 1088 and was historically used to store 55-gallon drums containing spent sandblasting material. Contains gravel areas that were historically sprayed with pesticides, herbicides and waste oil containing PCP.	35.4	4	Non-time critical removal action competed in 2000. Approximately 980 cy3 of surface and subsurface soil from near Buildings 1084, 1085, 1087, 1088, 1089 and 1090 was removed because metals and PAH levels exceeded industrial standards. During this action, the interior of Building 1087 was decontaminated by vacuuming to remove free dust and pressure washing. The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse. Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.
Buildings 1088 — Sandblasting Facility and 1091 — Paint Storage Igloo and surrounding open land area extending to Perry Road Site 32 (Sandblasting Waste Accumulation Area) Site 73 (2,4 dichlorophenoxyacetic acid, all grassed areas) Contains gravel areas that were historically sprayed with pesticides, herbicides and waste oil containing PCP.	35.5	4	Non-time critical removal action completed in 2000. Approximately 980 cy³ of surface and subsurface soil from near Buildings 1084, 1085, 1087, 1088, 1089 and 1090 was removed because metals and PAH levels exceeded industrial standards. During this action, the interior of Buildings 1088 and 1091 were decontaminated by vacuuming to remove free dust and pressure washing. The MI RI Report indicated levels of several constituents exceeding BCT screening criteria that did not present unacceptable risks for industrial reuse, but did present unacceptable risks for residential reuse. Per MI ROD effective September 6, 2001, no further action was required other than LUCs. LUCs implemented via the LUCIP portion of 2004 MI RD and submission of MI Notice of Land Use Restrictions in January 2005.

Category 4: Areas where release, disposal, and/or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken.

ENCLOSURE 4

TABLE 2 – NOTIFICATION OF HAZARDOUS SUBSTANCE STORAGE, RELEASE OR DISPOSAL

Subparcel Number and Description	Name of Hazardous Substance(s)	Date of Storage, Release or Disposal	Remedial Actions
4.9/Site 58 (Pesticides,	Aluminum Phosphide 20859738	Exact start date unknown, assumed facility construction in 1942 until building demolished in 1987.	Documentation does not support storage of hazardous substances in excess of 1,000
Herbicides Pad 267)	Calcium Cyanide 592018		kilograms or the 40 CFR 373 reportable quantities, except for the substances listed.
	Chlordane 57749 DDT 50293		There were no reported spills, or other evidence of hazardous substance release.
	Diazinon 33415		Other than LUCs, no further action required.
	Malathion 121755 Based on historical hazardous material storage records, this building potentially stored pesticides and herbicides included on Enclosure 4-2.		The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
5.2/Site 48 (Former PCB Transformer Storage Area)	Polychlorinated biphenyl (PCB)	Exact start or spill date unknown, assumed facility construction in 1942 until the 1970s	PCB-containing transformers were stored at this site for one year or more in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity.
		when transformer storage was moved to other open storage	There were no reported spills, but sampling results indicated evidence of hazardous substance releases.
		areas.	Non-time critical removal action completed in 1998. Approximately 400 cy ³ of surface soil was removed due to PCB and dieldrin levels.
			Other than LUCs, no further action required.
			The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
24.1/Site 27 (Former Recoupment Area, Building	Based on historical hazardous material storage records, this area potentially stored	Exact start date unknown, assumed building construction in 1942 until 1985.	Bulk hazardous substances were stored at this site for one year or more in excess of 1,000 kilograms or 40 CFR 373 reportable quantities.
873)	hazardous materials on Enclosure 4-1.	Spills: Operational spills occurred, but historical	Pre-RI activities included recoup/ repackaging of hazardous materials at Site 27 completed in 1985.

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Subparcel Number and Description	Name of Hazardous Substance(s)	Date of Storage, Release or Disposal	Remedial Actions
		documentation does not indicate that the 40 CFR 373 reportable quantity was exceeded.	Spill response: The Spill Team responded to operational spills, applied absorbent or neutralizer and disposed of the waste in accordance with federal, state and local regulations.
			Other than LUCs no further action required.
			The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
24.2/Open storage areas X02 and X03	storage areas X02 hazardous material storage records, these areas potentially stored	Exact start date unknown, assumed facility construction in 1942 until the 1980s when bulk hazardous materials were moved to bermed covered storage areas. Spills: Operational spills occurred, but historical documentation does not indicate that the 40 CFR 373 reportable quantity was exceeded.	Bulk hazardous substances were stored at X02 and X03 for one year or more in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity.
	petroleum products and flammable materials included on Enclosure 4-1.		Spill response: The Spill Team responded to operational spills, applied absorbent or neutralizer and disposed of the waste in accordance with federal, state and local regulations. Other than LUCs no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
24.3/Buildings 770 and T771 Site 34 (Underground	Ethylene glycol 107211 PCBs Petroleum products	Exact start date unknown, assumed building construction in 1952 until base	Documentation does not support storage of hazardous substances in excess of 40 CFR 373 reportable quantities, except for the items listed.
Storage Tanks at Building 770) Site 30 (Paint Spray Booth) Site 40 (Safety Based on historical hazardous material storage records, this building potentially stored petroleum	closure in 1997. Spills: Operational spills occurred, but historical documentation does not indicate that the 40	Spill response: On 7/9/90, the Spill Team responded, applied absorbent, excavated 14.5 cy ³ of soil, and collected confirmation samples to ensure no further removal necessary.	
Kleen Units) Site 41 (Satellite Drum Accumulation	llite maintenance products.	CFR 373 reportable quantity was exceeded except for the following:	The Spill Team responded to operational spills, applied absorbent or neutralizer and disposed of the waste in accordance with federal, state and local regulations.
Area)		7/9/90 – about 50 gallons of mineral oil containing PCBs (>50ppm, <500ppm)	Other than LUCs no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human

Subparcel Number and Description	Name of Hazardous Substance(s)	Date of Storage, Release or Disposal	Remedial Actions
25.1/Building 873 Demolished in 2002. Site 27 (Former Recoupment Area, Building 873)	Based on historical hazardous material storage records, this building potentially stored hazardous materials included on Enclosure 4-1.	Exact start date unknown, assumed building construction in 1942 until base closure in 1997. Spills: Operational spills occurred, but historical documentation does not indicate that the 40 CFR 373 reportable quantity was exceeded except for the following: 3/10/90 – 60 gallons tetrachloroethylene 7/11/94 – 55 gallons diethlene glycol	health. Bulk hazardous materials were stored at Building 873 in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity for one year or more. Pre-RI activities included recoup/ repackaging of hazardous materials at Site 27 completed in 1985. Spill response: On 3/10/90 the Spill Team responded, applied absorbent, excavated stained soil and disposed of the waste in accordance with federal, state and local regulations. On 7/11/94 and for operational spills, the Spill Team responded, applied absorbent or neutralizer and disposed of the waste in accordance with federal, state and local regulations. Other than LUCs no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
25.2/Building 875 and surrounding open land area. Building 875 was demolished in 2002.	Based on historical hazardous material storage records, this building potentially stored paint related materials included on Enclosure 4-1.	Exact start date unknown, assumed building construction in until base closure in 1997. Spills: Operational spills occurred, but historical documentation does not indicate that the 40 CFR 373 reportable quantity was exceeded.	Bulk hazardous substances were stored at Building 875 for one year or more in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity. Spill response: The Spill Team responded to operational spills, applied absorbent or neutralizer and disposed of the waste in accordance with federal, state and local regulations. Other than LUCs no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
27.2/Site 84 (Flammables, Solvents, Waste Oil, etc., Building 972)	Based on historical hazardous material storage records, this building potentially stored flammable	Exact start date unknown, assumed building construction in 1942 until the 1980s.	Bulk hazardous substances were stored at Building 972 for one year or more in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity. Spill response: The Spill Team responded to

Subparcel Number and Description	Name of Hazardous Substance(s)	Date of Storage, Release or Disposal	Remedial Actions
	materials and other solvents included on Enclosure 4-1.	Spills: Operational spills occurred, but historical documentation does not indicate that the 40 CFR 373 reportable quantity was exceeded.	operational spills, applied absorbent or neutralizer and disposed of the waste in accordance with federal, state and local regulations. Other than LUCs no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
30.1/Building 925 - Bulk Flammable Materials Warehouse	Based on historical hazardous material storage records, this building potentially stored flammable materials included on Enclosure 4-1.	1994 - 1997	Bulk hazardous substances were stored at Building 925 for one year or more in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity. There were no reported spills or other evidence of hazardous substance releases. Other than LUCs no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
30.2/Spill Area between Buildings 925 and 949 Site 53 (X25 Flammable Solvents Storage Area near Building 925)	Toluene 108883 Methyl ethyl ketone 78933 Xylenes 1330207 Based on historical hazardous material storage records, X25 potentially stored flammable materials included on Enclosure 4-1.	Exact start date unknown, assumed facility construction in 1942 until 1988. Spill: 1/19/88 - approximately 327 gallons of flammable materials (xylene, toluene, methyl ethyl ketone) released when the fabric tension structure covering the X25 bermed storage area collapsed during a storm and mixed with 30,000 gallons of water. Toluene in excess of the 40 CFR 373 reportable quantity.	Bulk hazardous substances were stored at X25 for one year or more in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity. Spill response: On 1/19/88 the Spill Team and the Memphis Fire Department Hazmat Team pumped out 30,000 gallons of water mixed with 327 gallons of flammable materials from the bermed area and disposed of the waste in accordance with federal, state and local regulations. Other than LUCs no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
30.3/Open land area surrounding Buildings 925	Based on historical hazardous material storage records, this	Exact start date unknown, assumed facility construction in	Bulk hazardous substances were stored at the open land area surrounding Buildings 925 and 949, including portions of open storage

Subparcel Number and Description	Name of Hazardous Substance(s)	Date of Storage, Release or Disposal	Remedial Actions
and 949, and portions of open storage areas X23	area potentially stored hazardous materials included on Enclosure	1942 until 1987 when Building 949 was constructed and bulk	area X23 and X25, for one year or more in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity.
and X25.	4-1.	hazardous substances were moved to bermed covered storage areas.	There were no reported spills or other evidence of hazardous substance releases.
		covered storage areas.	Other than LUCs no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
30.4/Building 949 Used for short- term hazardous	Based on historical hazardous material storage records, this building potentially		Bulk hazardous substances were stored at Building 949 for one year or more in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity.
materials staging prior to shipment.	stored hazardous materials included on Enclosure 4-1 There were no reported evidence of hazardous	There were no reported spills or other evidence of hazardous substance releases. Other than LUCs no further action required.	
			The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
31.1/Open storage areas X17, X19 and X21 and portions	Based on historical hazardous material storage records, this building potentially	Exact start date unknown, assumed facility construction in 1942 until the 1980s	Bulk hazardous substances were stored at X15, X17, X19, X21 and X23 for one year or more in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity.
of X15 and X23	stored petroleum and hazardous materials included on Enclosure	when bulk hazardous materials were moved to bermed covered	There were no reported spills or other evidence of hazardous substance releases.
	4-1.	storage areas.	Other than LUCs no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
32.1/Open storage areas X13 and X15	Based on historical hazardous material storage records, this building potentially stored petroleum and	Exact start date unknown, assumed facility construction in 1942 until the 1980s when bulk hazardous	Bulk hazardous substances were stored at X13 and X15 for one year or more in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity.
	hazardous materials included on Enclosure 4-1.	materials were moved to bermed covered storage areas.	There were no reported spills or other evidence of hazardous substance releases. Other than LUCs no further action required. The performance of industrial and/or commercial operations at this site in

Subparcel Number and Description	Name of Hazardous Substance(s)	Date of Storage, Release or Disposal	Remedial Actions
			accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
32.2/Building 835 – Hazardous Materials Storage	Based on historical hazardous material storage records, this building potentially stored hazardous materials included on Enclosure 4-1.	1985 – 1997 Spills: Operational spills occurred, but historical documentation does not indicate that the 40 CFR 373 reportable quantity was exceeded.	Hazardous substances were stored in Bldg. 835 for one year or more in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity. Spill response: The Spill Team responded to operational spills, applied absorbent or neutralizer and disposed of the waste in accordance with federal, state and local regulations. Other than LUCs no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
32.3/Site 28 (Recoupment Area, Building 865)	Based on historical hazardous material storage records, this building potentially stored hazardous materials included on Enclosure 4-1.	1988 - 1997	Bulk hazardous substances were stored at Building 865 for one year or more in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity. There were no reported spills or other evidence of hazardous substance releases. Other than LUCs no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
33.9/Open storage areas X05, X06, X07, X10 and X11, Building 737, and the open land area surrounding Buildings 737, 860 and 863 Building 737 – Pest Control Facility Site 42 (Former PCP Dip Vat Area)	Open storage areas X05, X06, X07, X10, X11 and X12: Based on historical hazardous material storage records, these areas potentially stored hazardous materials included on Enclosure 4-1. Open storage area X07: Transformers containing mineral oil (non-PCB and PCB containing)	Open storage areas: Exact start date unknown, assumed facility construction in 1942 until the 1980s when bulk hazardous materials were moved to bermed covered storage areas. Spills: Operational spills occurred, but historical documentation does not indicate that the 40 CFR 373 reportable	Bulk hazardous substances were stored at X05, X06, X07, X10, X11 and Building 737 for one year or more in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity. PCP was released in excess of the 40 CFR 373 reportable quantity at Sites 42 and 43 during operation of the dip vat. Spill response: The Spill Team responded to operational spills in the open storage areas, applied absorbent or neutralizer, removed stained soil and disposed of the waste in accordance with federal, state and local regulations.

Subparcel Number and Description	Name of Hazardous Substance(s)	Date of Storage, Release or Disposal	Remedial Actions
Site 43 (Former Underground PCP Tank Area)	Building 737: Based on historical material storage records, this building potentially stored hazardous materials included on Enclosure 4-2. Sites 42 and 43: Pentachlorophenol (PCP) 87865	quantity was exceeded. Building 737: 1961 – 1997 Sites 42 and 43: Exact start date unknown, assumed facility construction in 1942 until PCP dip vat removed in 1985.	At Sites 42 and 43, pre-RI activities included excavation of approximately 602 cy ³ of surface and subsurface soil as well as the underground piping system from the PCP dip vat area because of elevated levels of PCP. Soil with PCP concentrations greater than 200 ppb remained beneath the excavated area (10 feet below ground surface). Other than LUCs no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
35.1/Building 1090	Paint Thinner Lubricating Oil P-19 Preservation Oil Corrosion Preservation Compound	Exact start date unknown, assumed building construction in 1952 until base closure in 1997.	Documentation does not support storage of hazardous substances in excess of 1,000 kilograms or the 40 CFR 373 reportable quantities, except for the items listed. There were no reported spills, but sampling results indicated evidence of hazardous substance releases. Non-time critical removal action completed in 2000. Approximately 980 cy³ of surface and subsurface soil from near Buildings 1084, 1085, 1087, 1088, 1089 and 1090 was removed because metals and PAH levels exceeded industrial standards. During this action, Building 1090 was cleaned. Other than LUCs no further action required. BCT approval of MI IRACR and OPS determination pending. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
35.2/Site 29 (Former Underground Waste Oil Storage Tank) Site 87 (DDT, banned pesticides,	DDT 50293 Petroleum products	Exact start date unknown, assumed building construction in 1953 until completion of the non-time critical removal action in 2000.	Bulk hazardous substances were stored at Buildings 1084 and 1085 for one year or more in excess of 1,000 kilograms or the 40 CFR 373 reportable quantity. There were no reported spills, but sampling results indicated evidence of hazardous substance releases. Non-time critical removal action completed

Subparcel Number and Description	Name of Hazardous Substance(s)	Date of Storage, Release or Disposal	Remedial Actions
Building 1084) Site 88 (POL, Building 1085)			in 2000. Approximately 980 cy ³ of surface and subsurface soil from near Buildings 1084, 1085, 1087, 1088, 1089 and 1090 was removed because metals and PAH levels exceeded industrial standards.
			During this action, Buildings 1084 (Site 87) and 1085 (Site 88) were demolished. The hydraulic lift associated with Site 88 and a 1,000-gallon waste oil UST (Site 29) were removed.
·			Per MI ROD effective September 6, 2001, EBT of fluvial aquifer groundwater to reduce CVOC levels, with long-term groundwater monitoring (LTM) and LUCs were required for Site 29. EBT began in 2006 and completed in 2009. LTM will continue until RAOs achieved.
			The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
35.3/Building 1086 – Care and Preservation Shop/Paint Booth Site 30 (Paint Spray Booths)	Based on historical hazardous material storage records, this building potentially stored paint and paint related materials	1959 – 1983/1984	Documentation does not support storage of hazardous substances in excess of the 40 CFR 373 reportable quantities. There were no reported spills, but sampling results indicated evidence of hazardous substance releases.
	included on Enclosure 4-1.		Non-time critical removal action completed in 2000. Approximately 980 cy ³ of surface and subsurface soil from near Buildings 1084, 1085, 1087, 1088, 1089 and 1090 was removed because metals and PAH levels exceeded industrial standards. During this action, the sump in Building 1086 was cleaned due to levels of metals and naphthalene.
			Other than LUCs no further action required. The performance of industrial and/or
		}	commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.

Subparcel Number and Description	Name of Hazardous Substance(s)	Date of Storage, Release or Disposal	Remedial Actions
40 11 0 0 000000 2011 4 11 11 11 11 11 11 11 11 11 11 11 11			

42 U.S.C. §9620(h). This table provides information on the storage of hazardous substances for one year or more in quantities greater than or equal to 1,000 kilograms or the hazardous substance's CERCLA reportable quantity (whichever is greater). In addition, it provides information on the known release of hazardous substances in quantities greater than or equal to the substance's CERCLA reportable quantity. See 40 CFR Part 373.

Enclosure 4-1 Hazardous Materials Stored at DDMT

Acetic acid 64-19-7 Acetone 67-64-1

Aluminum sulfate 10043-01-3

Anti-foaming agent

Ammonium hydroxide 1336-21-6 Ammonium thiocyanate 1762-95-4

Ammonia nitrate

AAAF extinguishing agent Antisetting compound Amyl acetate 628-63-7

Acid muria

Baygon insecticide

Balan

Benzoin tincture compound

Biogenic 377c (potassium, hydroxide limonene)

Boric acid

Butyl acetate 123-86-4

Brake fluid

Bromax (weed killer)

Calcium chromate 13765-19-0 Calcium chloride, anhydrous

Coal tar solution

Calcium hypochlorite 7778-54-3

Calcium hydroxide Calcium carbonate Carbaryl 63-25-2

Charcoal activated, powdered Chromium trioxide, technical

Chlordane 57-74-9 Chlorine 7782-50-5

1-Chloro-2,3-epoxypropane 106-89-8

Chloroethane 75-00-3 Chloroform 67-66-3 O-Cresol 95-48-7 Cyclohexylamine Cyclohexane 110-82-7 Cyclohexanone 108-94-1

DDT 50-29-3 Dalpone #85 Diazinon 333-41-5

1,4-Dichlorobenzene 106-46-7 Dichloromethane 75-09-2

Dichlorvos 62-73-7 Dieldrin 60-57-1

Dimethyl phthalate 131-11-3

1,4-Dioxane 123-91-1 Diquat 85-00-7 Desiccant

Disinfectant detergent
Diatomaceous earth
Dischlor methane
Deodorant, rug and room
Disodium phosphate

Decontaminating agent (super tropical bleach)

Deglazing solvent Denatured alcohol

Dursban

Damping fluid (silicone)
Disinfectant, food services
Dry chemical extinguishing agent

Deicing fluid Etching solution

Ethyl acetate, technical 141-78-6

Ethyl alcohol

Ethylene glycol 107-21-1 Ethyl ether 60-29-7

Ethanol

Ferric chloride 7705-08-0

Fog oil

Foam, liquid fire extinguisher Formaldehyde 50-00-0 Formic acid 64-18-6

Fungicide Grease, aircraft

Hydrochloric acid 7647-01-0 Hydrofluoric acid 7664-39-3

Hydrofluorsilic acid

Hydrogen fluoride 7664-39-3

Hydrogen peroxide
Hydraulic fluid
Heat transfer fluid
Isobutyl alcohol 78-83-1
Isopropyl alcohol
Insulating oil, electrical
Inspection penetrant
Lead acetate 301-04-2
Lubricating oils

Lindane dust 1% 58-89-9

Lipophilie

Malathion 121-75-5 Mercury 7439-97-6 Methanol 67-56-1 Methyl alcohol 67-56-1 Methylene chloride 75-09-2

Enclosure 4-1 (continued)

Methyl ethyl ketone 78-93-3

Methyl ethyl ketone peroxide 1338-23-4

Methyl isobutyl ketone 108-10-1

Methyl macralate Monoethanolamine Morpholine Naled 300-76-5

Naphthenic acid 1338-24-5

Naphtha aliphatic Naphtha aromatic Naphtha technical Naphthalene 91-10-3 Nickel carbonyl 13463-36-3 Nitric acid 7697-37-2 Nitric oxide 10102-43-9 Nitrobenzene 98-95-3

Oxalic acid

Perchloroethylene 127-18-4

Phosgene 75-44-5

Phosphoric acid 7664-38-2

Potassium

Potassium cyanide 151-50-8

Potassium permanganate 7722-64-7 Potassium silver cyanide 506-61-6

Potassium superoxide

Pramitol Polyurethane

Paint

Prometone Petroleum, jelly

Petrolatum technical

Silver cyanide Ag(CN) 506-64-9 Potassium hydroxide 1310-58-3 Potassium permanganate 7722-64-7 Potssium silver cyanide 506-61-6

Potassium superoxide

Pramitol Polyurethane

Paint

Prometone Petroleum, Jelly

Petrolatum technical

Silver cyanide Ag (CN) 506-64-9

Sodium azide 26628-22-8

Sodium bisulfate 7631-90-5

Sodium cyanide Na (CN) 143-33-9

Sodium fluoride 7681-49-4

Sodium hydrosulfide 16721-80-5

Sodium hydroxide 1310-73-2

Sodium hypochlorite 7681-52-9

Sodium hexametaphosphate

Sodium bisulfate
Sodium bicarbonate
Sodium nitrate
Sodium sulfite

Sodium chlorate barium peroxide

Sodium borohydride Sodium metasilicate

Simazine

Sulfuric acid 7664-93-9

Sulmaic acid
Sulfur technical
Silicone compound
Toluene 108-88-3

1,1,1-Trichloroethane 71-55-6 1,1.2-Trichloroetane 79-00-5 Trichloroethylene 79-01-6 Trichlorotrifluoroethane

Trioxide

Toluene methyl isobutyl ketone

Urea

Xylene 1330-20-7 Zinc chloride 7646-85-7 Zinc phosphide 1314-84-7

Enclosure 4-2
Pesticides/Herbicides Inventory

FSN/MSN	Description	Registration No.
6840-00-514-0644	MONURON (H)	2749-60
6840-00-823-7849	Pyrethrin Aerosol	9148-51
6840-00-753-4973	Anticoagulant, Warfarin	6830-25
6840-00-753-4972	Anticoagulant Rodenticide	6830-32
6840-270-8262	Chlordane	551-33
6840-442-9438	Insecticide Strip (Dichlorvos)	2724-106
6840-00-089-4664	Rat Pucks (Rodenticide)	
6840-00-140-7930	Resmethrin Insecticide 2	1266-166
6840-00-685-5438	Malathion 57	
6840-00-180-6069	Octagon Roach Spray	901-149-6830
6840-00-684-8975	Oxy Monobor-Chlorate	10659-53
6840-753-5038	Diazinon Dust 2%	
6840-442-5698	Aluminum Phosphide Pellets	5857-2-AA
6840-00-253-3892	Insecticide DDT, 5%	
6840-264-6692	Insecticide DDT Dusting Powder	
6840-264-6692	Insecticide DDT Water Disp	
6840-00-281-3462	Insecticide DDT 20% Solution	
Chemical	Manufacturer	Registration No
Dursban, 2E,	Dow Chemical USA, Midland, MI	464-343-ZA
Fog & Mill Spray	Stephenson Chemical Co., Inc. College Park, GA	4887-29
ULD V-500	Micro-Gen Equipment Coroporation San Antonio, TX	11540-8
Turf Fungicide	Althea Laboratories, Inc. Milwaukee, WI	10088-37-AA
	.,,	
Kilzol	Crown Chemical, Inc., Rockford, IL	7273-81-6762
Kilzol Methyl Bromide		7273-81-6762 464-103
	Crown Chemical, Inc., Rockford, IL	

Enclosure 4-2 (continued)

Chemical	Manufacturer	Registration No.
Baygon	Chemagro Div of Baychem Corporation Kansas City, MO	3125-121-AA
Dexon	Chemagro Div of Baychem Corporation Kansas City, MO	3125-154-AA
Chlordane Dust	Hub States Corp., Indianapolis, IN	5602-18
Pro-Kill	Crown Chemical, Inc., Rockford, IL	7273-103
VI-CAD	Vineland Chemical Co., Vinland, NJ	2853-010
Calcium Cyanide	Wyoming Department of Agriculture Cheyenne, WY	35978-8690
Urox-B	Allied Chemical Corporation Morristown, NJ	218-MD-1
Chlordane, 8 EC	Velsicol Chemical Corporation Chicago, IL	876-104-AA
Aluminum Phosphide Tablets	Phostoxin Sales, Inc. Alhambra, CA	5857-1-AA
US Borax	US Borax & Chemical Corp Los Angeles, CA	1624-2

ENCLOSURE 5

TABLE 3 – PETROLEUM PRODUCT STORAGE, RELEASE, OR DISPOSAL

Subparcel Number and Description	Name of Petroleum Product(s)	Date of Storage, Release or Disposal	Remedial Actions
4.6/Building 254 and surrounding open land area/under- ground storage tank field Demolished in 1999.	Petroleum/Oil/ Lubricants Gasoline Diesel Fuel	Exact start date unknown, assumed facility construction in 1944 until base closure in 1997. Spills: 3/20/95 - 5 gallons diesel fuel	Petroleum products were stored at this location in excess of 55 gallons for one year or more. Spill response: The Spill Team responded, applied absorbent and, if appropriate, excavated stained soil. All waste disposed of in accordance with Federal, State and local regulations. Tank removals: 1,110-gallon gasoline UST in 1989 two 12,000-gallon and one 20,000-gallon gasoline USTs in 1986 replaced with an 18,000-gallon and a 20,000-gallon; 5,000-gallon heating oil tank in 1994 outside of Building 253; one 18,000-gallon and one 20,000-gallon gasoline USTs in 1998 for which TDEC UST closure approval obtained in December 1998. Other than LUCs, no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
4.7/Site 67 (MOGAS, Building 257) Building 256 Buildings demolished in 1999.	Gasoline Diesel Fuel	1945 – 1997 Spills: 4/20/90 – 2 gallons gasoline 8/11/93 – 4 gallons gasoline 8/31/93 – 4 gallons gasoline	Petroleum products were stored at this location in excess of 55 gallons for one year or more. Spill response: The Spill Team responded, applied absorbent and, if appropriate, excavated stained soil. All waste disposed of in accordance with Federal, State and local regulations. Tank removals: Two 1,000-gallon gasoline/diesel fuel ASTs removed in 1999. 2,580-gallon gasoline UST in 1989. Other than LUCs, no further action required. The performance of industrial and/or commercial operations at this site in

Subparcel Number and Description	Name of Petroleum Product(s)	Date of Storage, Release or Disposal	Remedial Actions
			accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
4.11/Site 66 (POL Building 253) Demolished in 1999. Site 40 (Safety Kleen Unit)	Petroleum/Oil/ Lubricants Hydraulic Oil	Exact start date unknown, assumed building construction in 1952 until base closure in 1997.	Petroleum products were stored at this location in excess of 55 gallons for one year or more. Other than LUCs, no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
24.2/Open storage areas X02 and X03	Petroleum/Oil/ Lubricants	Exact start date unknown, assumed facility construction in 1942 until base closure in 1997.	Petroleum products were stored at this location in excess of 55 gallons for one year or more. Other than LUCs, no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
24.3/Buildings 770 and T771 Site 34 (Underground Storage Tanks at Building 770)	Petroleum products Diesel fuel Gasoline Used motor oil	1950s - 1997	Petroleum products were stored at this location in excess of 55 gallons for one year or more. Building 770 has an oil/water separator that was pumped out quarterly and a floor drain. Tank Removals: 11,155-gallon diesel AST in 1994 11,155-gallon fuel oil AST in 1994 10,000-gallon heating oil UST in 1994 440-gallon gasoline UST in 1989 two 1,000-gallon used motor oil USTs in 1989 Other than LUCs, no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
25.1/Building 873 Demolished in 2002.	Petroleum/Oil/ Lubricants	Exact start date unknown, assumed facility construction in 1942 until base closure in 1997.	Petroleum products were stored at this location in excess of 55 gallons for one year or more. Other than LUCs, no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.

Subparcel Number and Description	Name of Petroleum Product(s)	Date of Storage, Release or Disposal	Remedial Actions
30.3/Open land area surrounding Buildings 925 and 949, and a portion of open storage area X23.	Petroleum/Oil/ Lubricant	Exact start date unknown, assumed facility construction in 1942 until base closure in 1997.	Petroleum products were stored at this location in excess of 55 gallons for one year or more. Other than LUCs, no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
31.1/Open storage areas X17, X19 and X21.	Petroleum/Oil/ Lubricant	Exact start date unknown, assumed facility construction in 1942 until base closure in 1997.	Petroleum products were stored at this location in excess of 55 gallons for one year or more. Other than LUCs, no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
32.1/Open storage areas X13 and X15	Petroleum/Oil/ Lubricant	Exact start date unknown, assumed facility construction in 1942 until base closure in 1997.	Petroleum products were stored at this location in excess of 55 gallons for one year or more. Other than LUCs, no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.
35.2/Building 1084 and surrounding open land Site 29 (Former Underground Waste Oil Storage Tank) Site 88 (POL, Building 1085)	Waste Oil	Exact start date unknown, assumed in the early 1950s based on construction dates for surrounding buildings. Exact end date also unknown, assumed 1995 when a 100-gallon hydraulic fluid UST was closed in place.	Petroleum products were stored at this location in excess of 55 gallons for one year or more. Non-time critical removal action completed in 2000. Approximately 980 cy3 of surface and subsurface soil from near Buildings 1084, 1085, 1087, 1088, 1089 and 1090 was removed because metals and PAH levels exceeded industrial standards. During this action, Buildings 1084 and 1085 were demolished. The hydraulic lift and the 1,000- gallon waste oil UST (Site 29) at Building 1085 were also removed. Other than LUCs, no further action required. The performance of industrial and/or commercial operations at this site in accordance with the Deed Restrictions will not pose an unacceptable risk to human health.

ENCLOSURE 6

CERCLA NOTICE, COVENANT, AND ACCESS PROVISIONS AND OTHER DEED PROVISIONS

The following CERCLA Notice, Covenant, and Access Provisions, along with the Other Deed Provisions, will be placed in the deed in a substantially similar form to ensure protection of human health and the environment and to preclude any interference with ongoing or completed remediation activities.

1. CERCLA NOTICE

For the Property, the Grantor provides the following notice, description, and covenant:

- A. Pursuant to section 120(h)(3)(A)(i)(I) and (II) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §9620(h)(3)(A)(i)(I) and (II)), notice is hereby provided that hazardous substances were stored, released, and disposed of on the Property. Available information regarding the type, quantity, and location of hazardous substances and the time at which such substances were stored, released, or disposed of, as defined in section 120(h), is provided in Exhibit _ (FOST Enclosure 4 Table 2 Hazardous Substance, Storage, Release and Disposal), attached hereto and made a part hereof. Additional information regarding the storage, release, and disposal of hazardous substances on the Property has been provided to the Grantee, receipt of which the Grantee hereby acknowledges. Such additional information includes, but is not limited to, the following documents: Environmental Baseline Survey (Woodward-Clyde, 1996), Main Installation Record of Decision (CH2M Hill, 2001), BRAC Cleanup Plan Version 13 (HDR|e²M, 2009), and Main Installation Interim Remedial Action Completion Report, Rev. 1 (HDR|e²M, 2010a).
- B. Pursuant to section 120(h)(3)(A)(i)(III) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §9620(h)(3)(A)(i)(III)), a description of the remedial action taken, if any, on the Property is provided in Exhibit _ (FOST Enclosure 4 Table 2 Hazardous Substance, Storage, Release and Disposal), attached hereto and made a part hereof. Additional information regarding the remedial action taken, if any, has been provided to the Grantee, receipt of which the Grantee hereby acknowledges. Such additional information includes, but is not limited to, the following documents: Summary Report, On-Site Remedial Activities at the Defense Depot Memphis (O.H. Materials, 1986), Environmental Baseline Survey (Woodward-Clyde, 1996), Post Removal Report Cafeteria Building (OHM, 1999), Remediation Report Removal Action at Old Paint Shop & Maintenance Area Parcels 35 & 28 (Jacob/Sverdrup Inc, 2000), Remediation Report Removal Action at Building 949 (Jacobs Engineering Group, 2002), and the Main Installation Notice of Land Use Restrictions filed with the City of Memphis/Shelby County Register of Deeds on January 26, 2005.

2. CERCLA COVENANT

Pursuant to section 120(h)(3)(A)(ii) and (B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §9620(h)(3)(A)(ii) and (B), the United States warrants that:

A. All remedial action necessary to protect human health and the environment with respect to any hazardous substance identified pursuant to section 120(h)(3)(A)(i)(I) of the

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 remaining on the Property has been taken before the date of this deed, and

B. Any additional remedial action found to be necessary after the date of this deed shall be conducted by the United States.

3. RIGHT OF ACCESS

- A. Pursuant to section [120(h)(3)(A)(iii)] of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §[9620(h)(3)(A)(iii)], the United States (the Grantor) retains and reserves a perpetual and assignable easement and right of access on, over, and through the Property, to enter upon the Property in any case in which a remedial action or corrective action is found to be necessary on the part of the United States (the Grantor), without regard to whether such environmental remedial action or corrective action is on the Property or on adjoining or nearby lands. Such easement and right of access includes, without limitation, the right to perform any environmental investigation, survey, monitoring, sampling, testing, drilling, boring, coring, test-pitting, installing monitoring or pumping wells or other treatment facilities, response action, corrective action, or any other action necessary for the United States (the Grantor) to meet its responsibilities under applicable laws and as provided for in this instrument. Such easement and right of access shall be binding on the Grantee and its successors and assigns, and shall run with the land.
- B. In exercising such easement and right of access, the United States (the Grantor) shall provide the Grantee or its successors or assigns, as the case may be, with reasonable notice of its intent to enter upon the Property and exercise its rights under this clause, which notice may be severely curtailed or even eliminated in emergency situations. The United States (Grantor) shall use reasonable means, but without significant additional costs to the United States (Grantor), to avoid and to minimize interference with the Grantee's and the Grantee's successors' and assigns' quiet enjoyment of the Property. At the completion of work, the work site shall be reasonably restored. Such easement and right of access includes the right to obtain and use utility services, including water, gas, electricity, sewer, and communications services available on the Property at a reasonable charge to the United States (Grantor). Excluding the reasonable charges for such utility services, no fee, charge, or compensation will be due the Grantee nor its successors and assigns, for the exercise of the easement and right of access hereby retained and reserved by the United States (Grantor).
- C. In exercising such easement and right of access, neither the Grantee nor its successors and assigns, as the case may be, shall have any claim at law or equity against the United States (Grantor) or any officer or employee, agent, contractor of any tier, or servant of the United States (Grantor) based on actions taken by the United States (Grantor) or its officers, employees, agents, contractors of any tier, or servants pursuant to and in accordance with this clause. Provided, however, that nothing in this paragraph shall be considered as a waiver by the Grantee or its successors and assigns of any remedy available to them under the Federal Torts Claims Act.

4. "AS IS"

A. The Grantee acknowledges that it has inspected or has had the opportunity to inspect the Property and accepts the condition and state of repair of the subject Property. The Grantee understands and agrees that the Property and any part thereof is offered "AS IS" without any representation, warranty, or guaranty by the Grantor as to quantity, quality, title, character,

condition, size, or kind, or that the same is in condition or fit to be used for the purpose(s) intended by the Grantee, and no claim for allowance or deduction upon such grounds will be considered.

- B. No warranties, either express or implied, are given with regard to the condition of the Property, including, without limitation, whether the Property does or does not contain asbestos or lead-based paint. The Grantee shall be deemed to have relied solely on its own judgment in assessing the overall condition of all or any portion of the Property, including, without limitation, any asbestos, lead-based paint, or other conditions on the Property. The failure of the Grantee to inspect or to exercise due diligence to be fully informed as to the condition of all or any portion of the Property offered, will not constitute grounds for any claim or demand against the United States (Grantor).
- C. Nothing in this "As Is" provision will be construed to modify or negate the Grantor's obligation under the CERCLA Covenant or any other statutory obligations.

5. HOLD HARMLESS

- A. To the extent authorized by law, the Grantee, its successors and assigns, covenant and agree to indemnify and hold harmless the Grantor, its officers, agents, and employees from: (1) any and all claims, damages, judgments, losses, and costs, including fines and penalties, arising out of the violation of the NOTICES, USE RESTRICTIONS, AND RESTRICTIVE COVENANTS in this Deed by the Grantee, its successors and assigns; and (2) any and all any and all claims, damages, and judgments arising out of, or in any manner predicated upon, exposure to asbestos, lead-based paint, or other condition on any portion of the Property after the date of conveyance.
- B. The Grantee, its successors and assigns, covenant and agree that the Grantor shall not be responsible for any costs associated with modification or termination of the NOTICES, USE RESTRICTIONS, AND RESTRICTIVE COVENANTS in this Deed, including without limitation, any costs associated with additional investigation or remediation of asbestos, lead-based paint, or other condition on any portion of the Property.
- C. Nothing in this Hold Harmless provision will be construed to modify or negate the Grantor's obligation under the CERCLA Covenant or any other statutory obligations.

6. POST-TRANSFER DISCOVERY OF CONTAMINATION

- A. If an actual or threatened release of a hazardous substance or petroleum product is discovered on the Property after the date of conveyance, Grantee, its successors or assigns, shall be responsible for such release or newly discovered substance if it is determined that the substance was not present at the time of transfer of the Property. If the Grantee, it successors or assigns, believe the discovered hazardous substance was present at the time of transfer of the Property, Grantee will immediately secure the site and notify the Grantor of the existence of the hazardous substances, and Grantee will not further disturb such hazardous substances without the written permission of the Grantor.
- B. Grantee, its successors and assigns, as consideration for the conveyance of the Property, agree to release Grantor from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of the delivery and acceptance of this Deed, where such substance or product was placed on the Property by the Grantee, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This paragraph shall not affect the Grantor's responsibilities to conduct response

actions or corrective actions that are required by applicable laws, rules, and regulations, or the Grantor's indemnification obligations under applicable laws.

7. ENVIRONMENTAL PROTECTION PROVISIONS

The Environmental Protection Provisions are at Exhibit _ (FOST Enclosure 7), which is attached hereto and made a part hereof. 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 Environmental Protection Provisions contained herein, and shall require the inclusion of the Environmental Protection Provisions in all further deeds, easements, transfers, leases, or grant of any interest, privilege, or license.

ENCLOSURE 7

ENVIRONMENTAL PROTECTION PROVISIONS

The following conditions, restrictions, and notifications will be attached, in a substantially similar form, as an exhibit to the deed and be incorporated therein by reference in order to ensure protection of human health and the environment.

1. FEDERAL FACILITIES AGREEMENT

The Grantor acknowledges that the Defense Depot Memphis, Tennessee has been identified as a National Priorities List (NPL) site under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended. The Grantee acknowledges that the Grantor has provided it with a copy of the Federal Facilities Agreement Between USEPA Region IV, TDEC, and Defense Logistics Agency at Defense Distribution Depot Memphis, Tennessee, effective March 6, 1995 (USEPA, 1995). For so long as the Property remains subject to the FFA, the Grantee, its successors and assigns, agree that they will not interfere with United States Department of the Army (Grantor) activities required by the FFA. In addition, should any conflict arise between the FFA and any amendment thereto and the deed provisions, the FFA provisions will take precedence. The Grantor assumes no liability to the Grantee, its successors and assigns, should implementation of the FFA interfere with their use of the Property.

2. LAND USE RESTRICTIONS

- A. The United States Department of the Army (Grantor) has undertaken careful environmental study of the Property and concluded that the land use restrictions set forth below are required to ensure protection of human health and the environment. The Grantee, its successors or assigns, shall not undertake nor allow any activity on or use of the Property that would violate the land use restrictions contained herein:
- (1) Residential Use Restriction. The Grantee, its successors and assigns, shall use the Property solely for commercial or industrial activities and not for residential purposes. For purposes of this provision, residential use includes, but is not limited to, single family or multifamily residences; child care facilities; nursing home or assisted living facilities; and any type of educational purpose for children/young adults in grades kindergarten through 12.
- (2) Groundwater Restriction. Grantee is hereby informed and acknowledges that the groundwater under Property has chlorinated volatile organic compounds that violate the Safe Drinking Water Act maximum contaminant levels. The Grantee, its successors and assigns, shall not access or use ground water underlying the Property for any purpose without the prior written approval of United States Department of the Army (the Grantor), the U.S. Environmental Protection Agency, the Tennessee Department of Environment and Conservation, and the Memphis/Shelby County Health Department Water Quality Branch. For the purpose of this restriction, "ground water" shall have the same meaning as in section 101(12) of the CERCLA.
- B. Modifying Restrictions. Nothing contained herein shall preclude the Grantee, its successors or assigns, from undertaking, in accordance with applicable laws and regulations and without any cost to the Grantor, such additional action necessary to allow for other less restrictive use of the Property. Prior to such use of the Property, Grantee shall consult with and obtain the approval of the Grantor, and, as appropriate, the State or Federal regulators, or the local authorities.

Upon the Grantee's obtaining the approval of the Grantor and, as appropriate, State or Federal regulators, or local authorities, the Grantor agrees to record an amendment hereto. This recordation shall be the responsibility of the Grantee and at no additional cost to the Grantor.

- C. Submissions. The Grantee, its successors and assigns, shall submit any requests to modifications to the above restrictions to the Department of the Army (Grantor), the U.S. Environmental Protection Agency, Tennessee Department of Environment and Conservation, and the Memphis/Shelby County Health Department Water Quality Branch, by first class mail, postage prepaid, addressed as follows:
 - a. Department of Army600 Army PentagonWashington, DC 20310-0600
 - U.S. Environmental Protection Agency, Region 4
 Federal Facilities Branch
 Attn: Tennessee Branch Coordinator
 61 Forsyth Street SW
 Atlanta, GA 30303
 - c. Tennessee Department of Environment and Conservation Division of Superfund Attn: Jamie Woods 2510 Mt. Moriah Road, Suite E645 Memphis, TN 38115-1520
 - d. Memphis/Shelby County Health Department
 Water Quality Branch
 814 Jefferson Avenue
 Memphis, TN 38105

3. NOTICE OF THE PRESENCE OF ASBESTOS AND COVENANT

- A. The Grantee is hereby informed and does acknowledge that non-friable asbestos or asbestos-containing material (ACM) has been found on the Property. The Property may contain improvements, such as buildings, facilities, equipment, and pipelines, above and below the ground, that contain non-friable asbestos or ACM. The Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency have determined that such unprotected or unregulated exposure to airborne asbestos fibers increases the risk of asbestos-related diseases, including certain cancers that can result in disability or death.
- 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. The Grantee agrees to be responsible for any remediation or abatement of asbestos found to be necessary on the Property to include ACM in or on buried pipelines that may be required under applicable law or regulation.
- C. The Grantee acknowledges that it has inspected or has had the opportunity to inspect the Property as to its asbestos and ACM condition and any hazardous or environmental conditions relating thereto. The Grantee shall be deemed to have relied solely on its own judgment in

assessing the overall condition of all or any portion of the Property, including, without limitation, any asbestos or ACM hazards or concerns.

4. NOTICE OF THE PRESENCE OF LEAD-BASED PAINT (LBP) AND COVENANT AGAINST THE USE OF THE PROPERTY FOR RESIDENTIAL PURPOSE

A. The Grantee is hereby informed and does acknowledge that all buildings on the Property, which were constructed or rehabilitated prior to 1978, are presumed to contain lead-based paint. Lead from paint, paint chips, and dust can pose health hazards if not managed properly. Every purchaser of any interest in Residential Real Property on which a residential dwelling was built prior to 1978 is notified that there is a risk of exposure to lead from lead-based paint that may place young children at risk of developing lead poisoning.

- B. The Grantee covenants and agrees that it shall not permit the occupancy or use of any buildings or structures on the Property as Residential Property, as defined under 24 Code of Federal Regulations Part 35, without complying with this section and all applicable Federal, State, and local laws and regulations pertaining to lead-based paint and/or lead-based paint hazards. Prior to permitting the occupancy of the Property where its use subsequent to sale is intended for residential habitation, the Grantee specifically agrees to perform, at its sole expense, the Army's abatement requirements under Title X of the Housing and Community Development Act of 1992 (Residential Lead-Based Paint Hazard Reduction Act of 1992).
- C. The Grantee acknowledges that it has inspected or has had the opportunity to inspect the Property as to its lead-based paint content and condition and any hazardous or environmental conditions relating thereto. The Grantee shall be deemed to have relied solely on its own judgment in assessing the overall condition of all or any portion of the Property, including, without limitation, any lead-based paint hazards or concerns.

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE