

FY2016

FOREST GLEN

Army Defense Environmental Restoration Program

Installation Action Plan

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Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multiyear cleanup program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern, and proposes a comprehensive, installation-wide approach, along with the costs and schedules associated with conducting investigations and taking the necessary remedial actions (RA). This IAP summarizes the actions taken and projects the future cleanup exit strategy.

In an effort to coordinate planning information between the restoration manager, the US Army Environmental Command (USAEC), Forest Glen, the executing agencies, regulatory agencies, and the public, an IAP was completed. The IAP is used to track requirements, schedules, and tentative budgets for all major Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

Acronyms

AEDB-R	Army Environmental Database-Restoration
AMC	Army Medical Command
amsl	Above Mean Sea Level
BRAC	Base Realignment and Closure
CC	Compliance-related Cleanup
CERCLA	Comprehensive Environmental Response and Compensation and Liability Act of 1980
CR	Compliance Restoration
DD	Decision Document
DORF	Diamond Ordnance Research Facility
DPS	Direct-push Sample
DRO	Diesel Range Organics
FGA	Forest Glen Annex
FRA	Final Remedial Action
FS	Feasibility Study
FTGL	AEDB-R abbreviation for Forest Glen Site
FY	Fiscal Year
IAP	Installation Action Plan
IMCOM	US Army Installation Management Command
IRA	Interim Remedial Action
IRP	Installation Restoration Program
LPH	Liquid Petroleum Hydrocarbon
LTM	Long-Term Management
LUC	Land Use Control
MCL	Maximum Contaminant Levels
MDE	Maryland Department of the Environment
NA	Not Applicable
NFA	No Further Action
NPL	National Priorities List
NPS	National Park Seminary
NPSV	National Park Seminary Venture
PA	Preliminary Assessment
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PCE	Tetrachloroethylene
POL	Petroleum, Oil, and Lubricants
PP	Proposed Plan
ppm	Parts Per Million
RA	Remedial Action
RA(C)	Remedial Action (Construction)
RAB	Restoration Advisory Board
RC	Response Complete
RCI	Residential Community Initiative
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation

Acronyms

RIP	Remedy-in-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
SVOC	Semi-volatile Organic Compound
TAPP	Technical Assistance for Public Participation
TCE	Trichloroethylene
TPH	Total Petroleum Hydrocarbon
TRC	Technical Review Committee
USACE	US Army Corps of Engineers
USACHPPM	US Army Center for Health Promotion and Preventive Medicine
USAEC	US Army Environmental Command
USEPA	US Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound
WRAIR	Walter Reed Army Institute of Research
WRAMC	Walter Reed Army Medical Center
WWII	World War II
µg/L	Micrograms Per Liter

Installation Information

Installation Locale

Installation Size (Acreage): 127

City: Silver Spring

County: Montgomery

State: Maryland

Other Locale Information

The Forest Glen Annex (FGA) is a 127-acre property located in Silver Spring, Maryland.

Installation Mission

FGA is an Army facility under command of Fort Detrick. The primary missions include biomedical research and development and retail services for military personnel and retired military personnel of the Washington area.

Current tenants at FGA include the Walter Reed Army Institute of Research (WRAIR), the Naval Medical Research Center, and the Armed Forces Institute of Pathology. Other activities that directly support the hospital include a motor pool, a vaccine preparation facility, a simulation center for training medical professionals under virtual combat conditions, and the Fisher House, for providing temporary housing to family members of wounded warriors. Additionally, there is a child care facility, several ball fields, a fitness center, a commissary, and a post exchange.

Lead Organization

IMCOM

Lead Executing Agencies for Installation

USAEC

Fort Detrick US Army Garrison

Regulator Participation

Federal	US Environmental Protection Agency (USEPA) Region III, Federal Facilities
State	Maryland Department of the Environment (MDE) Federal Facilities Division

National Priorities List (NPL) Status

FOREST GLEN is not on the NPL

Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status

RAB established 201209

Installation Information

Installation Program Summaries

IRP

Primary Contaminants of Concern: Metals, Other (Fuels), Polychlorinated Biphenyls (PCB), Volatiles (VOC)

Affected Media of Concern: Groundwater, Sediment, Soil, Surface Water

CR

Primary Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Affected Media of Concern: Soil

5-Year / Periodic Review Summary

5-Year / Periodic Review Summary

Status	Start Date	End Date	End FY
Planned	202205	202305	2023

5-Year / Periodic Review Details

Associated ROD/DD Name	Sites
Decision Document for landfill caps	FTGL-02, FTGL-03, FTGL-04

Land Use Control (LUC) Summary

LUC Title: LUCs landfills FTGL-2,3,4

Site(s): FTGL-02, FTGL-03, FTGL-04

ROD/DD Title: Decision Document for landfill caps

Location of LUC

Sites FTGL-02, -03, and -04.

Land Use Restriction: Landfill restriction - Prohibit activities that would impact the LF cap (or cover system) and drainage system, Landfill restriction - Prohibit excavation on LF cap or cover system, Landfill restriction - Restrict construction of buildings that may interfere with LF cap or cover system, Landfill restriction - Restrict plantings that interfere LF cap or cover system (roots that penetrate the cap or cover system), Landfill restriction - Restrict vehicular traffic

Types of Engineering Controls: Signs

Types of Institutional Controls: Dig Permits, Notations in Master Plan, Restrictions on Groundwater Withdrawal, Restrictions on land use

Date in Place: 201911

Modification Date: N/A

Date Terminated: N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

Documentation Date: N/A

LUC Enforcement: Annual Inspections, 5 Year Reviews

Contaminants: METALS, PAH, VOC

Additional Information

N/A

Cleanup Program Summary

Installation Historic Activity

In 1942, in order to provide convalescent care and rehabilitative care to wounded Soldiers injured in combat during World War II (WWII), the Department of the Army purchased approximately 174 acres to form the FGA. The acquired acreage included, in part, the buildings and grounds of the National Park College, which was the former site of the National Park Seminary (NPS), a finishing school for young ladies. After the end of WWII, the use of the property changed, and over time permanent buildings were constructed by the Army, generally in direct support of the Walter Reed Army Medical Center (WRAMC) mission. The NPS has been listed as an historic district on the National Register of Historic Places since 1972 and was the first historic district to be designated by Montgomery County in 1979.

In fall 2002, two peripheral parcels were declared excess. Approximately 20 acres of property were conveyed to the Maryland-National Capital Park and Planning Commission and are now part of Rock Creek Park. The second transfer of property included approximately 30 acres containing most of the buildings from the former NPS. This parcel was conveyed to Montgomery County and was subsequently sold to National Park Seminary Venture (NPSV), who is commercially redeveloping the property for residential purposes. It is now known that waste disposal activities had occurred on both of these excess properties.

The remaining 127-acre parcel has been significantly redeveloped for support of the WRAMC mission.

Although the exact dates are uncertain, the Army used portions of the property for solid waste disposal. There were at least two incinerators and at least three separate areas where solid waste was disposed. Additionally, at one time, the Diamond Ordnance Research Facility operated a nuclear reactor on the property. There are anecdotal reports of waste in lead caskets being disposed in one of the on-site disposal areas. The reactor building is currently in the process of being decommissioned.

Until Oct. 1, 2008, FGA was a satellite installation of the WRAMC. On Oct. 1, 2008, as a direct result of the Defense Base Realignment and Closure (BRAC) Commission recommendation, command and control of FGA passed from the WRAMC to Fort Detrick.

Installation Program Cleanup Progress

IRP

Prior Year Progress: In fiscal year (FY)16/17, the Army expects to install a fence at FTGL-02 as an interim measure and complete the remedial investigation (RI) for sites FTGL-02, -03, -04, -05, and -06.

Future Plan of Action: A feasibility study (FS), proposed plan (PP) and record of decision (ROD) for FTGL-02, -03, -04, -05 and -06 is expected in FY17/18.

CR

Prior Year Progress: Well gauging and monitoring were conducted.

Future Plan of Action: The Army expects to excavate contaminated soil in FY16/17 followed by site closure in FY18.

FOREST GLEN
Army Defense Environmental Restoration Program
Installation Restoration Program

IRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 6/1

Installation Site Types with Future and/or Underway Phases

- 1 Contaminated Sediments
(FTGL-05)
- 3 Landfill
(FTGL-02, FTGL-03, FTGL-04)
- 1 Spill Site Area
(FTGL-06)

Most Widespread Contaminants of Concern

Metals, Other (Fuels), Polychlorinated Biphenyls (PCB), Volatiles (VOC)

Media of Concern

Groundwater, Sediment, Soil, Surface Water

Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
FTGL-06	PCB Cont. North of Linden Ln	IRA	REMOVAL	2007
FTGL-01	Building 500	IRA	GROUND WATER TREATMENT	2013

Duration of IRP

Date of IRP Inception: 198901

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 202103/202103

Date of IRP completion including Long Term Management (LTM): 205006

IRP Contamination Assessment

Contamination Assessment Overview

This original property acquired by the Army consisted of 174 acres. The Army utilized the property, an annex to the WRAMC, as a convalescent residence for returning Soldiers. NPS buildings were renovated and patients were received beginning in January 1943 [US Army Center for Health Promotion and Preventive Medicine (USACHPPM), 2002]. Following the war, the facility was converted to use for medical research. Although the NPS buildings remained on the former campus, further development of the FGA was concentrated on the former plantation as more area was filled and leveled. Within the current FGA, Buildings 136, 154, and 155, formerly associated with the Edgewood Plantation, pre-date Army acquisition. Further development on the facility started with establishment of the WRAIR in the early-1950s with construction of Buildings 500, 501, 506, 508, and 512. These were primarily research laboratories and hazardous storage facilities. Building 179 (Salt Dome) was built in 1961, Buildings 516 and 518 [Diamond Ordnance Research Facility (DORF)] were built in 1963, and Building 178 (a logistics warehouse) was built in 1965. During the early-1970s, community facilities and additional research facilities, were added, including Buildings 161 (Army and Air Force Exchange Service, also known as the PX), 162 (Commissary), 163 (Commissary), 173 (Fisher House), 605 (Motor Pool), 606 (Laundry), 602, 603, 601, and 511 (former incinerator building). Building 164 (Army Air Force Exchange Service (AAFES) Station) was built in 1977. Building 172 was built in 1995. Building 503, the main WRAIR building, was built in 1997, along with Buildings 509 and 510. Building 609 (Fire Station) was built in 2001 (2007 Master Plan).

In September 1972, many of the structures associated with the NPS were listed on the National Register of Historic Places as a National Historic District. This Historic District is bounded by Smith Drive to the east, the Capital Beltway to the north, and Linden Lane to the south and west, with the inclusion of an area opposite Linden Lane at the intersection with Woodstock Court and Woodstock Avenue. Three additional structures (Buildings 135, 136, and 139) were identified as contributors to the character of the NPS (CH2M Hill, 1996), but were not incorporated into the Historic District. In 2002, two portions of the FGA were declared excess. One portion on the northwest portion of the FGA, approximately 20 acres in size, was conveyed to the Maryland-National Capital Park and Planning Commission and incorporated into the Rock Creek Regional Park. The other, a 26-acre property consisting primarily of the aforementioned NPS Historic District, was transferred to the NPSV, who initiated redevelopment of the buildings for residential use. An additional 5 acres on either side of Linden Lane were subsequently transferred for residential development.

On Oct. 1, 2008, as a direct result of the BRAC Commission recommendation, the command of FGA was passed from WRAMC to Fort Detrick.

Historically, the Army has used portions of the FGA property for solid waste disposal. Undocumented landfilling of waste materials reportedly occurred in three separate areas from the 1940s until the early-1970s. This dumping largely occurred in low-lying ravine areas. Wastes buried in the landfills reportedly included construction debris, medical waste, incinerator ash, household waste, and office waste (USACHPPM, 2002). There have been multiple instances when landfill waste materials have been encountered at FGA construction sites (i.e., construction of the Commissary in 1972; WRAIR Building 503 investigation in 1989; National Museum of Health and Medicine investigation in 2009).

Prior to the start of RI field activities, medical waste had been positively confirmed in one (FTGL-04) of the three landfill areas. Medical wastes were reportedly uncovered in 1989 during the WRAIR Building preconstruction investigation (ANL, 1990). Landfill use may predate the medical laboratories on-site; waste was reportedly transported from the Walter Reed Main Section and disposed of at FGA from 1942 until 1966 (ESE, 1984).

Radiological materials have been used for research activities at WRAMC and FGA. Isotopes were received and stored at Forest Glen. There are anecdotal stories that lead caskets containing remains of animals used in radiological testing were buried in the landfills at FGA. According to the 1984 Installation Assessment of WRAMC, animals contaminated by radioactive materials during research activities were bagged and stored frozen prior to shipment to the Hanford disposal facility in Richland, Washington or until decayed (i.e., half-life shorter than 65 days), then disposed of as regular solid waste (ESE, 1984). Additionally, at one time the DORF operated a nuclear reactor on the property. In 1977, the DORF was decommissioned; however, requirements have since changed. The reactor is currently being decommissioned again under the new requirements so that it can be removed from the Nuclear Regulatory Commission list. The USACE performed sampling at the DORF and is now in the process of analyzing alternatives for the disposition of the remaining structure. No reported spills or as a result of isotope use or reactor operation resulting in environmental contamination by radioactive materials have occurred at FGA (ESE, 1984).

Since 1989, US Army Toxic and Hazardous Materials Agency and USACHPPM have conducted various preliminary assessments (PA) and site inspections (SI) of the Forest Glen property. These activities have identified several areas where solid waste disposal has occurred. Additionally, at least two incinerators and one nuclear reactor were operated on the property.

IRP Contamination Assessment

Contamination Assessment Overview

One leaking underground storage tank (UST) has been identified and groundwater adjacent to one of the waste disposal areas was determined to be contaminated with very high levels of tetrachloroethylene at approximately 13 milligrams per liter.

Additionally, PCB contamination in soil has also been detected on active Army and formerly owned Army property, including the 32 acre NPS property. In 2005 the MDE performed a Brownfields site assessment of the NPS property which included sampling surface soil, subsurface soil, sediment and the stream. The MDE study revealed elevated levels of PCBs in soil. In 2006/2007, the Army Installation Restoration Program (IRP) paid for removal and off-site disposal of contaminated soils. Since then, PCBs have been discovered in downgradient stream sediments above the regulatory limit of 1 part per million (ppm), potentially extending beyond the NPS property and onto county property. In 2009, additional PCB contamination was discovered on the active Army land parcel north of Linden Lane. The extent of contamination is not known. Additional characterization is needed for the entire site, active and former Army property, to determine extent of contamination and source(s).

Prior to Oct. 1 2008, the Forest Glen IRP was managed by WRAMC. At that time, WRAMC had identified only one site (FTGL-01 Building 500 oil spill) as eligible for the IRP. Since taking over the program in 2008, Fort Detrick has identified five additional IRP eligible sites, including the PCB-contaminated area, for a total of six IRP eligible sites. USAEC concurs that these six sites are Environmental Restoration, Army eligible and warrant further action under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). FTGL-01 Building 500 oil spill site was closed out with no further action (NFA) in FY14.

Cleanup Exit Strategy

The RI/FS and appropriate decision documents (DD) for all sites will be completed. Selected remedies will be implemented.

IRP Previous Studies

Year	Title	Author	Date
1983	Installation Assessment Walter Reed AMC	USEPA	OCT-1983
1984	Installation Assessment of Headquarters, Walter Reed Army Medical Center, Washington DC and Noncontiguous Sections, Forest Glen, Silver Spring and Glen Haven, Wheaton, MD, Report No. 341, June 1984	Environmental Science and Engineering, Inc.	JUN-1984
1989	Groundwater Quality Study No. 38-26-0354-90, Forest Glen Section, Walter Reed Army Medical Center, Washington, DC, 19-30 June 1989	United States Army Environmental Hygiene Agency	JUN-1989
	Information Paper, Action Taken at Forest Glen for Investigative, Underground POL Contamination	WRAMC	JUL-1989
1990	An onsite installation assessment was conducted Jan. 16-20, 1984, at Headquarters, Walter Reed Army Medical Center, Washington, D.C., to determine the presence of any toxic or hazardous materials and to assess the potential for off post migration. Based on the findings of this assessment, a field survey was not recommended.	USAEHA	MAR-1990
	Site Characterization and Qualitative Human Risk Assessment for the Walter Reed Army Institute of Research Building Site, Forest Glen, Maryland	Energy Systems Division, Argonne National Laboratory	JUL-1990
	Report No CETHA-IR-CR-90174 Preliminary Assessment Report for the Forest Glen Annex of Walter Reed Army Medical Center, October 30, 1990	Roy F. Weston, Inc.	OCT-1990
1993	Groundwater Quality Consultation No. 38-26-K1HT-93, Forest Glen Section, Walter Reed Army Medical Center, Washington, DC, 8-10 February 1993	USAEHA	FEB-1993
	Pump & Treat Facilities Near Bldg 500, Forest Glen, MD	WRAMC/ATEC	NOV-1993
1996	Environmental Baseline Study for the Historic District of the Forest Glen Annex of Walter Reed Army Medical Center	USACE Baltimore/CH2M Hill	JAN-1996
1998	Hydrogeologic Investigation No. 38-EH-8209-98, Walter Reed Army Medical Center, Building 500 Area of the Forest Glen Annex, Silver Spring, Maryland, 11-14 May 1998.	U.S. Army Center for Health Promotion and Preventive Medicine	MAY-1998
2000	Preliminary Assessment No. 38-EH-4949-00, Forest Glen Annex, Walter Reed Army Medical Center, Silver Spring, Maryland, 27-31 March 2000	US Army Center for Health Promotion and Preventive Medicine	MAR-2000
	Site Assessment Rubble Dump FGA	General physics Corp	NOV-2000
2001	Site Inspection No. 38-EH-3039-01, Forest Glen Annex, Walter Reed Army Medical Center, Silver Spring, Maryland, 5-17 March 2001	US Army Center for Health Promotion and Preventive Medicine	MAR-2001

IRP Previous Studies

Year	Title	Author	Date
2001	Groundwater Consultation No. 38-EH-7240-01, Fuel Recovery Area, Forest Glen Annex, Walter Reed Army Medical Center, Silver Spring, Maryland, 21-22 August 2001	US Army Center for Health Promotion and Preventive Medicine	AUG-2001
2002	Phase II Site Inspection No. 38-EH-2995-02, Forest Glen Annex, Walter Reed Army Medical Center, Silver Spring, Maryland, 10-17 June 2002	US Army Center for Health Promotion and Preventive Medicine	JUN-2002
	A Review of the Groundwater Extraction and Treatment System Effectiveness Review Walter Reed Army Medical Center Forest Glen Section, June 2002	C.C. Johnson & Malhoira	JUN-2002
	Geohydrologic Study No. 38-EH-6184-02, Fuel Recovery Area, Forest Glen Annex, Walter Reed Army Medical Center, Silver Spring, Maryland, 26-28 August and 3 September 2002	US Army Center for Health Promotion and Preventive Medicine	DEC-2002
2003	Monthly Site Monitoring Report - January 2003, Groundwater Pump and Treat System, Building 500/Forest Glen Annex	ENSAT	JAN-2003
2004	Monitoring Well Services No. 38-EH-02UV-04, Walter Reed Army Medical Center, Forest Glen Annex, Silver Spring, Maryland, 26-30 April 2004	U.S. Army Center for Health Promotion and Preventive Medicine	APR-2004
	Expanded Site Inspection No. 38-EH-035M-05, Forest Glen Annex, Silver Spring, Maryland, 15-17 November 2004	US Army Center for Health Promotion and Preventive Medicine	NOV-2004
2005	Risk Assessment Data Collection Report for the Proposed RCI Parcel at Walter Reed Army Medical Center, Forest Glen Annex	US Army Corps of Engineers, Mobile District	MAY-2005
	Geohydrologic Study No. 38-EH-045J-05, Former Leaking Underground Storage, Tank, Building 156, Forest Glen Annex, Walter Reed Army Medical Center, Silver Spring, Maryland, 29-30 June 2005	US Army Center for Health Promotion and Preventive Medicine	JUN-2005
	Monitoring Well Services No. 38-EH-045L-05, Walter Reed Army Medical Center, Forest Glen Annex, Silver Spring, MD, 13-14 June 2005	U.S. Army Center for Health Promotion and Preventive Medicine	JUN-2005
2006	Rubble Dump Closure Letter	MDE	JUN-2006
	Ambient Air Quality Assessment No. 43-EL-058Q-06, Soil Gas Sampling, Walter Reed Army Medical Center, Forest Glen Annex, Washington, DC, 12 July 06	US Army Center for Health Promotion and Preventive Medicine	JUL-2006
2008	Groundwater Monitoring Report No. 38-EH-09SA-08, Forest Glen Annex, Walter Reed Army Medical Center, Silver Spring, MD, 10-11 and 17-24 June 2008	US Army Center for Health Promotion and Preventive Medicine	JUN-2008
	Monthly Site Monitoring Report - June 2008, Groundwater Remediation Services, Building 500/Forest Glen Annex	Chesapeake GeoSciences, Inc.	JUN-2008
	Stream, Sediment And Groundwater Characterization And Action Plan, National Park Seminary, Hume Drive, Silver Spring, Maryland, ECS Project No. 12014-A -	ECS MID-ATLANTIC, LLC	JUL-2008

IRP Previous Studies

2008

Title	Author	Date
July 2008		
Former Leaking Underground Storage Tank Building 156, Forest Glen Annex 25-26 June and 16 July 2008	U.S. Army Center for Health Promotion and Preventive Medicine	JUL-2008
Monthly Site Monitoring Report - August 2008, Groundwater Remediation Services, Building 500/Forest Glen Annex	Chesapeake GeoSciences, Inc.	AUG-2008
Environmental Assessment, Base Realignment and Closure Recommendations and Master Planning Activities, Walter Reed Army Medical Center, Forest Glen Annex, Maryland	US Army Corps of Engineers, Mobile District/Tetra Tech	AUG-2008
Finding of No Significant Impact, Implementation of 2005 Base Realignment and Closure (BRAC) Recommendations and Master Planning Activities, Walter Reed Army Medical Center, Forest Glen Annex, Maryland	BRAC	SEP-2008
Monthly Site Monitoring Report - September 2008, Groundwater Remediation Services, Building 500/Forest Glen Annex	Chesapeake GeoSciences, Inc.	SEP-2008
Monthly Site Monitoring Report - October 2008, Groundwater Remediation Services, Building 500/Forest Glen Annex	Chesapeake GeoSciences, Inc.	OCT-2008
Monthly Site Monitoring Report - November 2008, Groundwater Remediation Services, Building 500/Forest Glen Annex	Chesapeake GeoSciences, Inc.	NOV-2008
Monthly Site Monitoring Report - December 2008, Groundwater Remediation Services, Building 500/Forest Glen Annex	Chesapeake GeoSciences, Inc.	DEC-2008

2009

Interim Response Implementation Report For PCB Characterization And Self-Implementing On-Site Cleanup And Disposal Actions National Park Seminary, Hume Drive, Silver Spring, Maryland, January 2009	ECS MID-ATLANTIC, LLC	JAN-2009
Historic Open Dump Characterization Summary Report, Final Document, July 2009	Shaw Environmental, Inc.	JUL-2009
Environmental Investigation Report, Construction Support for National Museum of Health and Medicine, Forest Glen Annex of U.S. Army, Fort Detrick, Forest Glen, Maryland (Draft)	U.S. Army Corps of Engineers, Baltimore District	AUG-2009
Monthly Site Monitoring Report - October 2009, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	OCT-2009
Monthly Site Monitoring Report - November 2009, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	NOV-2009
Groundwater Quality Report #38-EH-0C2U-09, 9-17 September and 17 December 2009	CHPPM	DEC-2009
Monthly Site Monitoring Report - December 2009, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	DEC-2009

2010

Monthly Site Monitoring Report - January 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	FEB-2010
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IRP Previous Studies

2010

Title	Author	Date
Monthly Site Monitoring Report - February 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	MAR-2010
Monthly Site Monitoring Report - March 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	APR-2010
Monthly Site Monitoring Report - April 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	MAY-2010
Monthly Site Monitoring Report - May 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	JUN-2010
Monthly Site Monitoring Report - June 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	JUL-2010
Monthly Site Monitoring Report - July 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	AUG-2010
Monthly Site Monitoring Report - August 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	SEP-2010
Monthly Site Monitoring Report - September 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	OCT-2010
Monthly Site Monitoring Report - October 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	NOV-2010
Monthly Site Monitoring Report - November 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	DEC-2010

2011

Monthly Site Monitoring Report - December 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	JAN-2011
Remedial Investigation Work Plan	AECOM	JAN-2011
Monthly Site Monitoring Report - December 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	JAN-2011
Maryland Department of Environment Oil Control Program Work Plan Approval	MDE	JAN-2011
Monthly Site Monitoring Report - January 2011, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	FEB-2011
Monthly Site Monitoring Report - February 2011, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	MAR-2011
"Building 500, Petroleum Release Site	Arc Environmental, Inc.	APR-2011
Monthly Site Monitoring Report - March 2011, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	APR-2011
Monthly Site Monitoring Report - March 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	MAY-2011

IRP Previous Studies

2011

Title	Author	Date
Monthly Site Monitoring Report - April 2011, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	MAY-2011
Monthly Site Monitoring Report - May 2010, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	JUN-2011
Monthly Site Monitoring Report - May 2011, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	JUN-2011
Monthly Site Monitoring Report - June 2011, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	JUL-2011
Monthly Site Monitoring Report - Jul 2011, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	AUG-2011
Monthly Site Monitoring Report - Aug 2011, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	SEP-2011
Monthly Site Monitoring Report - Sep 2011, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	OCT-2011
Monthly Site Monitoring Report - Oct 2011, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	NOV-2011
Monthly Site Monitoring Report - Nov 2011, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	DEC-2011

2012

Monthly Site Monitoring Report - Dec 2011, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	JAN-2012
Monthly Site Monitoring Report - Jan2012, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	FEB-2012
Monthly Site Monitoring Report - Feb 2012, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	MAR-2012
Monthly Site Monitoring Report - Mar 2012, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	APR-2012
Monthly Site Monitoring Report - Apr 2012, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	MAY-2012
Monthly Site Monitoring Report - May 2012, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	JUN-2012
Monthly Site Monitoring Report - Jun 2012, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	JUL-2012
Monthly Site Monitoring Report - Jul 2012, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	AUG-2012
Monthly Site Monitoring Report - Aug 2012, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	SEP-2012

IRP Previous Studies

2012	Title	Author	Date
	Monthly Site Monitoring Report - Sep 2012, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	OCT-2012
	Monthly Site Monitoring Report - Oct 2012, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	NOV-2012
	Monthly Site Monitoring Report - Nov 2012, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	DEC-2012
2013	Monthly Site Monitoring Report - Dec 2012, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	JAN-2013
	Monthly Site Monitoring Report - Jan 2013, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	FEB-2013
	Monthly Site Monitoring Report - Feb 2013, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	MAR-2013
	Monthly Site Monitoring Report - Mar 2013, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	APR-2013
	Monthly Site Monitoring Report - Apr 2013, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	MAY-2013
	Monthly Site Monitoring Report - May 2013, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	JUL-2013
	Monthly Site Monitoring Report - July 2013, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	AUG-2013
	Monthly Site Monitoring Report - Aug 2013, Groundwater Remediation Services, Building 500/Forest Glen Annex	Arc Environmental, Inc.	SEP-2013
	Community Involvement Plan	AECOM	SEP-2013
2014	FTGL-01 No Further Action	MDE oil control program	JUN-2014

FOREST GLEN

Installation Restoration Program

Site Descriptions

Site ID: FTGL-02

Site Name: Ballfield/Helipad/Rubble Dump Site

STATUS

Regulatory Driver: CERCLA

RRSE: MEDIUM

Contaminants of Concern: Metals, Volatiles (VOC)

Media of Concern: Soil

Phases	Start	End
PA.....	198901.....	199001
SI.....	199002.....	200003
RI/FS.....	200901.....	201805
RD.....	201806.....	201905
IRA.....	201209.....	201708
RA(C).....	201905.....	202005
LTM.....	202006.....	205006

RIP Date: N/A

RC Date: 202005

SITE DESCRIPTION

Previous environmental investigations at FGA identified a waste disposal site in the area of the installation's baseball/softball fields. Waste disposal activities occurred between 1942 and 1966. Materials reportedly disposed included construction debris, medical waste, incinerator ash, and household and office waste. Streams located downgradient of FTGL-02 have been identified as being impacted by iron precipitation. Metal debris is visible along the hillside topographically upgradient from the streams. The Historic Open Dump was investigated along the northern boundary of the landfill.

A site-wide PA was completed at FGA in 2000. The purpose of the PA was to conduct site reconnaissance to identify any waste sites needing further investigation (i.e., an SI) or emergency response action. The PA indicated that the landfills operated from 1942 until 1966 and two ballfields and several buildings are currently located on the former landfill sites. Wastes buried in the landfills were identified as construction debris, medical waste, incinerator ash, household waste, and office waste. The PA also identified that two incinerators were constructed north of Building 511. Papers, contaminated wastes, animal bodies, bedding and garbage were incinerated, and ash from the incinerators was buried in the landfills. Lastly, the PA identified some exposed waste and construction debris in the wooded area north of the ballfields. Recommendations made in the PA concerning the landfills included sampling of the groundwater downgradient of the former landfills to determine if there is contaminant leaching and the removal of surficial waste and construction debris near the ballfields.

Anecdotal information indicates medical testing was done on large animals which were then buried in lead caskets in the landfill. Metal debris can be seen in the ground near the discharge points.

A risk assessment data collection report for the proposed Residential Community Initiative (RCI) parcel was prepared by Tetra Tech in 2005. Soil and groundwater samples were collected immediately northeast of FTGL-02 during this investigation and analyzed for VOCs, semi-volatile organic compounds (SVOC), pesticides, metals, and total petroleum hydrocarbons(TPH)-diesel range organics (DRO). A total of 10 soil borings were conducted and 10 direct-push samples (DPS) were collected (DPS-5 through -14). Soil sampling results indicated multiple arsenic and one benzo(a)pyrene detection above the USEPA industrial risk-based concentrations. The highest level of contaminants was found in the parking lot located west of Building 156. These higher contamination levels correspond to the soil logs documenting visible construction waste material as opposed to soils located north and south of the parking lot which were generally reworked native material with only trace amounts of debris. Perched water was sampled in one boring and all analytes were detected at levels below groundwater screening levels. Based on this investigation and prior borings (B1-B4) and test pits (11-13), fill material was found in most of the investigation area ranging in thickness from 2 to 10 feet at the northern end of the parcel and parking lot to 22 feet at the most southern boring, B4.

From 2008 to 2009, an investigation of the rubble dump adjacent to the ball fields was completed. Based on the results, buried waste was determined to be present past the ball field. Additional RI work was completed in FY12/13 to determine the nature and extent of landfill and its impacts. In FY14/15 the following actions were taken: (1) an Engineering Evaluation/Cost Analysis to install fencing to prevent public access to waste and contaminated surface water; (2) The Action Memo for the fence construction was signed 29 July 2015; (3) additional RI fieldwork was conducted and a draft final RI was submitted to MDE. A final RI is expected in

Site ID: FTGL-02
Site Name: Ballfield/Helipad/Rubble Dump Site

FY16. A final FS, PP, and ROD are expected in FY17/18.

CLEANUP/EXIT STRATEGY

The Army will complete an FS, a PP, a DD, and an RA. The anticipated remedy is landfill capping, monitoring and land use controls (LUC). The LUCs will include groundwater use and access/dig restrictions.

Site ID: FTGL-03

Site Name: Commissary Landfill

STATUS

Regulatory Driver: CERCLA

RRSE: HIGH

Contaminants of Concern: Metals, Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	198901.....	199001
SI.....	199903.....	200003
RI/FS.....	200901.....	201805
RD.....	201806.....	201905
RA(C).....	201905.....	202005
LTM.....	202006.....	205006

RIP Date: N/A

RC Date: 202005

SITE DESCRIPTION

The USACHPPM PAs dated 1990 and 2000 identified several waste disposal sites. One site is located in the area of the installation's commissary. Disposal occurred between 1942 and 1966. Materials disposed included construction debris, medical waste, incinerator ash, household and office waste.

Prior to construction of the WRAIR Building 503, USACE performed an investigation of the 8-acre WRAIR Building 503 site located immediately south of FTGL-03 and covering a portion of FTGL-04. The purpose of the characterization was to help determine soil disposal methods and environmental safety requirements since significant soil removal was a component of the building construction. Additionally, a surface water sample was collected from South Ireland Creek (just west of Stephen Sitter Ave) which drains a system of storm sewers and a small watershed underlying the FTGL-03 and - 04 landfills. This sample location was selected since this stream is the only available source of surface water that has been exposed to the landfills. The soil and water samples were analyzed for VOCs, SVOCs, PCBs, pesticides, and metals. The surface water sample results obtained from the South Ireland Creek which is fed by storm sewers and the watershed underlying the upgradient landfills had detections of 1,1,2,2- tetrachloroethane [28 micrograms per Liter (µg/L)] and of tetrachloroethylene (PCE) (17 µg/L). Fill types identified during the investigation included: large pieces of mortared bricks and concrete, steel reinforcing rod, sheet metal, pipes, incinerator waste, and medical waste.

During the Phase II of the SI, one new monitoring well (FG213) was installed upgradient of FTGL-03 to better define the chlorinated solvent contamination found in FG203 in Phase I. This new well and the Phase I wells (FG203, FG204, FG205, and FG206) were sampled. Groundwater results show beryllium, chromium, lead and nickel concentrations detected in existing wells exceeded maximum contaminant levels (MCL) in multiple samples; however, dissolved levels of these metals did not exceed MCLs. PCE, trichloroethylene (TCE), cis-1,2-dichloroethene, and vinyl chloride were detected in existing monitoring well FG203 at concentrations above MCLs. PCE and TCE were detected in new monitoring well FG213 at concentrations above MCLs. PCE has been detected at concentrations over 17,000 ppb. Topography and groundwater contours are inconclusive if the source of the VOC contamination is on-site or off-site.

An environmental site investigation was conducted in 2009 to help determine soil disposal methods and environmental safety requirements for construction of the National Museum of Health and Medicine overtop the northeast portion of FTGL-03. Three environmental borings (EB1, EB2, and EB3) were conducted within the footprint of the future building to collect subsurface soil and groundwater samples. Two groundwater samples were collected from two of the open borings (EB1 and EB3) for VOC analysis. Soil samples were collected at each borehole up to 22 feet below the ground surface and analyzed for VOCs, SVOCs, metals, pesticides and PCBs. PCE was detected above the drinking water MCL in the groundwater samples collected from borings EB1 (38 ug/L) and EB3 (150 ug/L). For soils, only arsenic and chromium were detected at concentrations above industrial screening values. The subsurface investigation indicates that fill material was found at depths to 21 feet. The fill material consisted of mainly demolition materials such as brick.

FY15 actions include submission of a draft final RI report to MDE. A final RI for the soils is expected in FY15/16. A final RI for groundwater is expected in FY16. The final FS, PP, and ROD for soils and groundwater are expected in FY17/18.

Site ID: FTGL-03

Site Name: Commissary Landfill

CLEANUP/EXIT STRATEGY

The Army will complete an FS, a PP, a DD and an RA. The anticipated remedy is landfill capping of appropriate areas, monitoring and LUCs. LUCs will include groundwater use and access/dig restrictions.

Site ID: FTGL-04
Site Name: Bldg 511 Landfill

STATUS

Regulatory Driver: CERCLA
RRSE: MEDIUM
Contaminants of Concern: Metals, Volatiles (VOC)
Media of Concern: Soil

Phases	Start	End
PA.....	198903.....	199903
SI.....	199903.....	200003
RI/FS.....	200901.....	201805
RD.....	201806.....	201905
RA(C).....	201905.....	202005
LTM.....	202006.....	205006
RIP Date:	N/A	
RC Date:	202005	

SITE DESCRIPTION

Previous environmental investigations at FGA identified a waste disposal site in the area of Building 511. Waste disposal activities may have occurred between 1942 and 1966. Wastes buried in this landfill may include construction debris, medical waste, incinerator ash, and household and office waste. A significant investigation effort occurred in 1989 in the northern portion of this landfill prior to the construction of the WRAIR building in which medical and other wastes were encountered. It has been reported anecdotally that approximately 1,700 truckloads of waste were removed and transported to the landfill at Fort Meade. The amount and location of fill material ultimately removed during the construction of Building 503 is unknown.

A characterization and qualitative risk assessment were conducted of the WRAIR Building 503 site which covered a portion of the northern end of FTGL-04. Additionally, a surface water sample was collected from South Ireland Creek which drains a system of storm sewers and a small watershed underlying the FTGL-03 and -04 landfills. Results of soil and water sampling found elevated levels of VOCs in the South Ireland Creek downgradient surface water sample and only low VOC concentrations in groundwater. In soils, elevated concentrations of acetone, polycyclic aromatic hydrocarbons (PAH), lead, and mercury were detected in one or more sample locations.

A 2000 PA site reconnaissance identified the FTGL-04 landfill and indicated it operated from 1942 to 1966. Wastes buried in the landfills were identified as construction debris, medical waste, incinerator ash, household waste, and office waste. Medical wastes were reportedly uncovered during excavation in the parking lot southwest of the WRAIR Building.

During the Phase I SI, groundwater monitoring wells were installed to intercept groundwater after it passed under the landfills. Two monitoring wells (FG201 and FG202) were installed downgradient of FTGL-04. Sampling results indicated monitoring well FG201 exhibited the highest contaminant levels with beryllium, chromium, lead and nickel above MCLs. Only lead exceeded MCLs in FG202.

Additional RI work was completed in FYs '12, '13, and '14 to determine the nature and extent of landfill and its impacts.

A final RI is expected in FY16. A final FS, PP, and ROD are expected in FY17/18.

CLEANUP/EXIT STRATEGY

The Army will complete an FS, a PP, a DD, and an RA. The anticipated remedy is landfill capping of appropriate areas, monitoring and LUCs. LUCs will be groundwater use and access/dig restrictions.

Site ID: FTGL-05

Site Name: Bldg 607 Washdown Rack

STATUS

Regulatory Driver: CERCLA

RRSE: MEDIUM

Contaminants of Concern: Metals

Media of Concern: Sediment, Surface Water

Phases	Start	End
PA.....	198901.....	199001
SI.....	199903.....	200003
RI/FS.....	200901.....	201805

RIP Date: N/A

RC Date: 201805

SITE DESCRIPTION

The Building 607 washrack was formerly located in the motor pool near Building 605. The washrack was enclosed on three sides and had a concrete floor. From 1975 until 1979, the washrack discharged directly to the storm water sewer. The storm water then discharged to the downgradient stream (Stream E) south of Building 606. In 1979, an oil/water separator was reportedly connected to the washrack. At some point after 1979, use of the Building 607 washrack was terminated and a newer bus wash (which is also no longer in use) was reportedly constructed at the location. SI sampling results from downgradient Stream E indicated elevated on-site lead concentrations at one sediment and one surface water sample location.

The finished grade in the area of former Building 607 is relatively flat at approximately 315 feet above mean sea level (amsl). The rinsate is collected in the storm sewer from the former washrack and reportedly discharged to Stream E. The topography of the stream channel slopes from approximately 295 feet amsl at the storm sewer outfall near Building 606 to 240 feet amsl where the stream runs off-site. Based on aerial photographs, it appears that Stream E flows into an underground culvert shortly after running off-site, resurfaces after passing under an area of industrial use, and then discharges to Rock Creek.

Based on the PA findings, the Phase I SI for FTGL-05 included surface water and sediment sampling in Stream E that historically received the storm sewer discharge from the Building 607 washrack. Two co-located surface water and sediment samples (FGS1/FGSED1 and FGS2/FGSED2) were obtained from Stream E. Sediment samples were analyzed for total metals, TPH-DRO, pesticides, PCBs, and SVOCs. Surface water samples were analyzed for the same chemicals except for pesticides and PCBs. Sample results indicated that only lead was detected above screening levels in one sediment sample (FGSED02) and one surface water sample (FGS1) in Stream E. The source of these elevated lead levels was identified as unknown but potentially from runoff from the motor pool.

Additional RI work was completed in FYs '12 and '13 to determine the nature and extent of landfill and its impacts. FY14 actions included collecting additional RI data. A final RI is expected in FY16. The FS and NFA PP and ROD are expected in FY17/18.

CLEANUP/EXIT STRATEGY

The Army will complete an FS, a PP, and a DD. The Army expects that no RA will be required at this site. Therefore, an NFA DD will be prepared. The Army anticipates closing this site with NFA in FY17/18.

STATUS

Regulatory Driver: CERCLA

RRSE: HIGH

Contaminants of Concern: Polychlorinated Biphenyls (PCB)

Media of Concern: Sediment, Soil

Phases	Start	End
PA.....	200601.....	200612
SI.....	200601.....	200612
RI/FS.....	201001.....	201801
RD.....	201802.....	201902
IRA.....	200701.....	200709
RA(C).....	201903.....	202103

RIP Date: N/A

RC Date: 202103

SITE DESCRIPTION

PCB contamination has been detected on active Army and formerly owned Army property. This site includes a portion known as the NPS. The NPS consists of 32 acres of land located in Silver Spring, Maryland south of Interstate I-95/I-495 and north of Linden Lane. The property is improved with several residential structures constructed circa late 1800s to 1920s. The property was originally occupied by a hotel and later by National Park College, an all-girls school through the early-1940s. The property was occupied by the Walter Reed Army Medical Annex from the 1940s to recent times until it was excecised to Montgomery County, Maryland and in turn sold to private developer, NPSV. The owner is currently redeveloping the property for residential use.

In 2005, the MDE performed a brownfields site-specific assessment of the property which included sampling surface soil, subsurface soil, sediment, and the stream. The MDE revealed, in part, the presence of 1,2,4-trichlorobenzene at an estimated concentration of 15,000 ppm in one subsurface soil sample collected behind (i.e. to the north of) Building 138. Follow-up sampling performed during a Voluntary Cleanup Program study on the property confirmed the presence of trichlorobenzene and revealed the presence of PCB in the soil at each of the seven DPSs north of Building 138. PCBs were detected at depths extending to 12 feet below ground and at concentrations ranging up to 7,090 ppm.

Based on the results of that testing, an intensive sampling program was performed to delineate the extent of contamination. Soil, groundwater and stream sediments were sampled during the investigation. Soil sampling results were reported to the USEPA, Region III in the Sept. 21, 2006 report titled "Notification of Intent to Perform Self-Implemented On-Site Cleanup and Disposal of PCB Remediation Waste." An environmental services cooperative agreement was signed in 2006 to remediate the area north of Building 138. Contaminated soils were removed and disposed off-site during 2006 and 2007.

Six stream sediment samples in 2006 revealed that five of the sediment samples contained PCBs at concentrations ranging from 0.721 to 19.2 ppm. PCBs have been discovered in downgradient stream sediments above the regulatory limit of 1 ppm, potentially extended beyond the NPS property and onto county property.

In 2009, additional PCB contamination was discovered on the active Army land parcel north of Linden Lane near the salt dome. The extent of contamination was delineated as part of the RI that is underway. Additional soil sediment and surface water samples were collected in FY14 in the down-gradient reaches of the stream. A final RI is expected in FY16. An FS, PP, and ROD are expected in FY17/18 followed by soil excavation in FY19/20.

CLEANUP/EXIT STRATEGY

Removal of PCB-contaminated sediment is anticipated, followed by site closure.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FTGL-01	Building 500	201403	Letter of No Further Action MDE June 14

IRP Schedule

Date of IRP Inception: 198901

Past Phase Completion Milestones

1990

PA (FTGL-02 - Ballfield/Helipad/Rubble Dump Site, FTGL-03 - Commissary Landfill, FTGL-05 - Bldg 607 Washdown Rack)

1992

ISC (FTGL-01 - Building 500)

1999

PA (FTGL-04 - Bldg 511 Landfill)

2000

SI (FTGL-02 - Ballfield/Helipad/Rubble Dump Site, FTGL-03 - Commissary Landfill, FTGL-04 - Bldg 511 Landfill, FTGL-05 - Bldg 607 Washdown Rack)

2007

PA (FTGL-06 - PCB Cont. North of Linden Ln)

SI (FTGL-06 - PCB Cont. North of Linden Ln)

IRA (FTGL-06 - PCB Cont. North of Linden Ln)

2009

INV (FTGL-01 - Building 500)

2013

IRA (FTGL-01 - Building 500)

2014

CAP (FTGL-01 - Building 500)

Projected Phase Completion Milestones

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

Site ID	Site Name	ROD/DD Title	ROD/DD Date
FTGL-03	Commissary Landfill	Decision Document for landfill caps	20180530
FTGL-02	Ballfield/Helipad/Rubble Dump Site	Decision Document for landfill caps	20180530
FTGL-04	Bldg 511 Landfill	Decision Document for landfill caps	20180530

Final RA(C) Completion Date: 202103

Schedule for Next Five-Year Review: 2023

Estimated Completion Date of IRP at Installation (including LTM phase): 205006

FOREST GLEN IRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTGL-02	Ballfield/Helipad/Rubble Dump Site	RI/FS						
		RD						
		IRA						
		RA(C)						
		LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTGL-03	Commissary Landfill	RI/FS						
		RD						
		RA(C)						
		LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTGL-04	Bldg 511 Landfill	RI/FS						
		RD						
		RA(C)						
		LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTGL-05	Bldg 607 Washdown Rack	RI/FS						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTGL-06	PCB Cont. North of Linden Ln	RI/FS						
		RD						
		RA(C)						

FOREST GLEN
Army Defense Environmental Restoration Program
Compliance Restoration

CR Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 1/0

Installation Site Types with Future and/or Underway Phases

1 Underground Storage Tank
 (CCFTGL-07)

Most Widespread Contaminants of Concern

Petroleum, Oil and Lubricants (POL)

Media of Concern

Soil

Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
N/A				

Duration of CR

Date of CR Inception: 199201

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201805/201805

Date of CR completion including Long Term Management (LTM): 201805

CR Contamination Assessment

Contamination Assessment Overview

On Dec. 14, 1992 a tank was removed from the former 1,000-gallon steel UST leak site immediately north of Building 156; however, free phase liquid petroleum hydrocarbon (LPH) remains around the site due to incomplete excavation of contaminated soil during the UST removal.

Cleanup Exit Strategy

The Compliance Restoration (CR) program at Forest Glen currently consists of one site, a former leaking UST at Building 156. Excavation of contaminated soil at the site is anticipated in FY16/17. A request for site close-out will be submitted to MDE Oil Control Program after one year of monitoring following the excavation and removal of the contaminated soil.

CR Previous Studies

Title

Author

Date

There are no Previous Studies

FOREST GLEN
Compliance Restoration
Site Descriptions

Site ID: CCFTGL-07

Site Name: leak from a 1000 gallon UST

STATUS

Regulatory Driver: RCRA
Contaminants of Concern: Petroleum, Oil and Lubricants (POL)
Media of Concern: Groundwater, Soil

Phases	Start	End
ISC.....	199201.....	199202
INV.....	199202.....	199203
CAP.....	201401.....	201412
IMP(C).....	201409.....	201805

RIP Date: N/A
RC Date: 201805

SITE DESCRIPTION

On Dec. 14, 1992 a tank was removed from the former 1,000-gallon steel UST leak site immediately north of Building 156; however, free phase LPH remains around the site due to incomplete excavation of contaminated soil during the UST removal. A project was funded in 2015 to excavate and remove the contaminated soil in the tank excavation area and perform vapor intrusion testing in nearby buildings.

CLEANUP/EXIT STRATEGY

The Army is planning to excavate the remaining contaminated soil in FY17. Site closure will be requested after the removal has been completed and monitoring verifies the source has been removed. Site close-out is expected in FY18.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
There are no NFA sites			

CR Schedule

Date of CR Inception: 199201

Past Phase Completion Milestones

1992

ISC (CCFTGL-07 - leak from a 1000 gallon UST)

INV (CCFTGL-07 - leak from a 1000 gallon UST)

2015

CAP (CCFTGL-07 - leak from a 1000 gallon UST)

Projected Phase Completion Milestones

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

To Be Determined

Final RA(C) Completion Date: 201805

Schedule for Next Five-Year Review: 2023

Estimated Completion Date of CR at Installation (including LTM phase): 201805

FOREST GLEN CR Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
CCFTGL-07	leak from a 1000 gallon UST	IMP(C)						

Community Involvement

Technical Review Committee (TRC): None

Community Involvement Plan (Date Published): 201309

Restoration Advisory Board (RAB): RAB established 201209

RAB Adjournment Date: N/A

RAB Adjournment Reason: None

Additional Community Involvement Information

A RAB was formed in FY12 and in September 2013, the Army finalized a community relations plan.

Administrative Record is located at

The Administrative Record for Forest Glen is located at: Fort Detrick IPR Office, Building 262,
Fort Detrick, MD 21702-5000
301-619-2049

Information Repository is located at

The Information Repository for Fort Glen is located at:
Silver Spring Public Library
8901 Colesville Road
Silver Spring, MD 20910
240-773-9420

Current Technical Assistance for Public Participation (TAPP):N/A

TAPP Title: N/A

Potential TAPP: N/A

