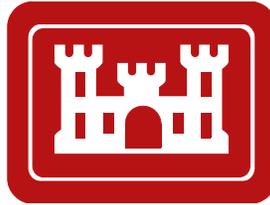


FINAL

**SITE MANAGEMENT PLAN
2015 ANNUAL UPDATE
FORT GEORGE G. MEADE, MD**

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LIST OF ARCONYMS AND ABBREVIATIONS

µg	microgram
AEDB-R	Army Environmental Database-Restoration
AOI	area of interest
AST	above-ground storage tank
ASP	Ammunition Supply Point
BRAC	Base Realignment and Closure
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAIS	chemical agent identification set
CAP	Corrective Action Plan
CCl ₄	carbon tetrachloride
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFD	Clean Fill Dump
CSA	Comprehensive Site Assessment
CSF	Covered Storage Facility
CSL	Closed Sanitary Landfill (formerly the Active Sanitary Landfill)
DISA	Defense Information System Agency
DMA	Defense Mapping Agency
DNT	dinitrotoluene
DoD	Department of Defense
DOI	U.S. Department of the Interior
DOL	Department of Logistics
DPDO	Defense Property Disposal Office
DPW	Fort Meade Directorate of Public Works
DRMO	Defense Reutilization and Marketing Office
EBS	Environmental Baseline Survey
ED	Environmental Division
EIS	Environmental Impact Statement
EMO	Environmental Management Office
EPA	U.S. Environmental Protection Agency
EPC	exposure point concentration
ERA	Ecological Risk Assessment
ERD	enhanced reductive dechlorination
ERIS	Environmental Restoration Information System
ESD	Explanation of Significant Difference
FESI	Focused Enhanced Site Investigation
FFA	Federal Facility Agreement
FFS	Focused Feasibility Study
FGGM	Fort George G. Meade
FS	Feasibility Study
FTA	Fire Training Area
FY	Fiscal Year
GPR	ground penetrating radar
HEI	High Explosives Impact and Disposal

HHHA	Helicopter Hangar Area
HHRA	human health risk assessment
IAL	Inactive Landfill
IAP	Installation Action Plan
IRA	Interim Removal Action
IRAR	Interim Removal Action Report
IRACR	Interim Remedial Action Completion Report
IRP	Installation Restoration Program
kg	kilogram
L	liter
lb	pound
LPA	Lower Patapsco Aquifer
LPH	liquid petroleum hydrocarbon
LPR	Little Patuxent River
LTGM	long-term groundwater monitoring
LTM	long-term monitoring
LTMP	Long-Term Monitoring Plan
LUC	land use control
LUCRD	Land Use Control Remedial Design
MC	munitions constituents
MCL	Maximum Contaminant Level
MCPA	2-methyl-4-chlorophenoxyacetic acid
MCPP	methylchlorophenoxypropionic acid
MDE	State of Maryland Department of the Environment
MDL	Method Detection Limit
MEC	Munitions and Explosives of Concern
mg	milligram
MMRP	Military Munitions Response Program
MNA	monitored natural attenuation
MP	Motor Pool
MRA	Munitions Response Area
MRS	Munitions Response Site
MTBE	methyl tert-butyl ether
MW	monitoring well
NFA	no further action
NPL	National Priorities List
NSA	National Security Agency
NT	North Track
NTCRA	Non-Time Critical Removal Action
OCP	Oil Control Program
ODA	Ordnance Demolition Area
OE	ordnance and explosive
O&M	Operation and Maintenance
OU	Operable Unit
OWS	oil/water separator

PA	Preliminary Assessment
PA/SI	Preliminary Assessment/Site Inspection
PAH	polycyclic aromatic hydrocarbon
PCBs	polychlorinated biphenyls
PCE	tetrachloroethene
PID	photoionization detector
POL	petroleum, oil, and lubricants
PP	Proposed Plan
PRAP	Proposed Remedial Action Plan
PRR	Patuxent Research Refuge
PRR-NT	Patuxent Research Refuge-North Tract
RA	Remedial Action
RACR	Response Action Completion Report
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operation)
RAO	Remedial Action Objective
RAR	Remedial Action Report
RAWP	Remedial Action Work Plan
RBC	risk-based concentration
RC	Response Complete
RCA	Riot Control Agent
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RDX	cyclotrimethylene trinitramine
RFA	RCRA Facility Assessment
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RIP	Remedy in Place
ROD	Record of Decision
RSL	Regional Screening Level
SBCR	Soil Background Concentration Report
SI	Site Inspection
SMP	Site Management Plan
SSI	Supplemental Site Investigation
SVOC	semivolatile organic compound
SWMU	Solid Waste Management Unit
TAP	Tipton Airfield Parcel
TAP OU	Tipton Airfield Parcel Operable Unit
TCE	trichloroethene
TCLP	toxicity characteristic leaching procedure
TMP	Transportation Motor Pool
TNT	trinitrotoluene
TPH	total petroleum hydrocarbons
TPH-DRO	total petroleum hydrocarbons – diesel range organics
TPH-GRO	total petroleum hydrocarbons – gasoline range organics
USACE	U.S. Army Corps of Engineers

USAEC	U.S. Army Environmental Command
USAEHA	U.S. Army Environmental Hygiene Agency
USAOC	U.S. Architect of the Capitol
USFWS	U.S. Department of the Interior, Fish and Wildlife Service
UST	underground storage tank
UXO	Unexploded Ordnance
VOC	volatile organic compound
WR	Wash Rack
WWI	World War I
WWII	World War II

NOTES

The format of this yearly update of the Site Management Plan (SMP) is consistent with last year's update. Minor changes were made to tables and figures incorporating updates made since 2014.

The Fort Meade Environmental Management Office (EMO) changed its name to the Environmental Division (ED). However, most of the reference documents used to compile this SMP refers to the EMO. To be consistent with the source documents, this SMP uses the same acronym that the source document used.

The United States (U.S.) Environmental Protection Agency's (EPA's) Regional Screening Levels (RSLs) are the default action levels for most sites at the installation. RSLs were historically identified as risk-based concentrations (RBCs); both acronyms are used interchangeably throughout this document. Older studies reference the RBCs, and that term is used in this SMP to be consistent with the source document.

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1. INTRODUCTION

This document is the Fiscal Year (FY) 2015 (FY15) Site Management Plan (SMP) Annual Update for Fort George G. Meade (Fort Meade), located in Anne Arundel County, Maryland. Overall coordination of the SMP and contract management was provided by the United States Army Corps of Engineers (USACE)-Baltimore District. This work is being performed under USACE-Baltimore District contract W912DR-13-D-0002, Delivery Order 0004 with Stell Environmental, Inc.

The purpose of the SMP is to summarize the current status and planned activities and to project long-term progress for all areas of interest (AOIs) at the installation in support of the Federal Facility Agreement (FFA). The U.S. Environmental Protection Agency (EPA), U.S. Department of the Army, U.S. Department of the Interior (DOI), and U.S. Architect of the Capitol (USAOC) signed the FFA 18 and 19 June 2009. The FFA went into effect 6 October 2009. The SMP and annual updates are a requirement of the FFA.

1.1 OVERVIEW OF THE SITE MANAGEMENT PLAN

The SMP is a management tool for planning, reviewing, and setting priorities for all remedial response activities to be conducted at the installation. This SMP includes all known sites at Fort Meade. Most of these sites have had previous environmental investigations, and several have undergone or are undergoing response actions. Proposed environmental cleanup responses, actions, schedules, and milestones for response actions are included in this SMP.

The sites listed in the SMP were compiled from many sources. The principle sources were the Fort Meade Environmental Division, the Preliminary Assessment/Site Inspection (PA/SI) (URS Group, Inc., 2007d), and Installation Action Plans (IAPs) (Fort Meade, 2006, 2007, 2008c, 2009, 2010, 2011, 2013).

Numerous sites at Fort Meade have changed names, designations, or have acquired additional designations over time. To aid the reader in locating specific sites, a Crosswalk of Environmental AOIs table is included as Table 1-1, which starts on page 1-4. This table provides the following, as applicable, for each site:

- Operable Unit (OU) number
- Army Environmental Database-Restoration (AEDB-R) number [a designation beginning with FGGM (Fort George G. Meade)]
- Solid Waste Management Unit (SWMU) number
- Building number
- Site identifier (how the site is commonly referred to, such as the Clean Fill Dump or the Pesticide Shop Building)
- Status (open or closed)

1.2 OBJECTIVES OF THE SITE MANAGEMENT PLAN

The objective of the SMP is to summarize the status of each AOI in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process for all response actions at Fort Meade, including sites that fall under the Installation Restoration Program (IRP), Base Realignment and Closure (BRAC), and Military Munitions Response Program (MMRP). The SMP includes a history of the sites evaluated by the Fort Meade Environmental Partnership in 2003 and 2004. The Fort Meade Environmental Partnership was a consortium consisting of the EPA, State of Maryland Department of the Environment (MDE), USACE, Fort Meade, U.S. Army Environmental Command (USAEC), and the Military District of Washington. The Fort Meade Environmental Partnership met to "...collaboratively plan, document, and implement

environmental investigations and cleanups (FGGM, 1999)." Factors supporting past decisions are discussed in appropriate detail to explain the rationale for site-specific actions and recommendations.

This SMP presents the rationale for future investigations and remediation activities and the estimated schedule to complete these activities. The use of this SMP facilitates annual adjustments in scheduled activities for reasons such as Federal budget constraints, changes in scope of investigation/ remediation activities, or other unanticipated events, without modifying the FFA. For each AOI, this SMP includes:

1. A list of all identified site names
2. Proposed environmental cleanup responses, actions, and schedules for response actions
3. Deadlines for the submittal of primary documents covering the current fiscal year
4. Any primary actions identified with regard to:
 - a. Deadlines
 - b. Near-term milestones
 - c. Out-year milestones
 - d. Target dates
 - e. Project end dates

1.3 SITE MANAGEMENT PLAN UPDATES

The SMP is updated annually to reflect revised priorities as work progresses and additional information becomes available. This document is the 2015 annual update. EPA's letters of acceptance for the 2009, 2010, 2011, 2012, 2013, and 2014 SMPs and for the current 2015 SMP are included in Appendix A.

1.4 INSTALLATION DESCRIPTION

1.4.1 INSTALLATION LOCATION AND GEOMORPHOLOGY

The U.S. Army Garrison Fort Meade is located in Anne Arundel County, MD, along the Little Patuxent and Patuxent Rivers, midway between Baltimore, MD, and Washington, DC as shown on the Regional Location Map (Figure 1-1). Figure 1-2 presents the Fort Meade jurisdictional boundary map. The BRAC parcel is located south of the installation. The community of Odenton, MD, borders the eastern edge of Fort Meade. In general, the topography of Fort Meade is flat and gently slopes toward scattered water bodies throughout the installation. Local small-scale variations in elevation are abundant. Much of the installation topography has been altered by development.

1.4.2 INSTALLATION HISTORY

Fort Meade began operation in 1917 as Camp Meade (MGS, 1917), a 4,000-acre World War I (WWI) training facility. Training activities included infantry combat operations. The U.S. Army Tank School operated at the facility from 1918 to 1932 (Fort Meade, 2014). The facility was renamed Fort George G. Meade in 1928. In 1941, the facility was expanded to 13,596 acres to accommodate the additional training requirements of World War II (WWII).

In 1988, under BRAC, ranges and similar training areas were identified for closure. To date, 8,100 acres have been transferred to the DOI Patuxent Research Refuge (PRR) for use as a wildlife refuge: 7,600 acres in October 1991 and 500 acres in January 1993 as part of Defense Appropriation Bills for 1991 and 1992, respectively (Fort Meade, 2014).

The Army retained 900 acres of the BRAC parcel, which included the 366-acre Tipton Airfield. The Army began leasing the Tipton Airfield parcel to Anne Arundel County for use as a General Aviation Facility in 1998 and officially transferred the property to Anne Arundel County on 1 November 1999 (Fort Meade, 2014).

After the 1988 BRAC realignment, the installation covered 5,067 acres (Fort Meade, 2008c). The current installation boundaries encompass the area previously referred to as the cantonment area, which is used for administrative, recreational, and housing facilities. Fort Meade contains approximately 65.5 miles of paved roads, 3.3 miles of secondary roads, and about 1,300 buildings (Fort Meade, 2014).

Fort Meade's mission is to provide installation operations support for facilities and infrastructure, and quality of life and protective services in support of Department of Defense (DoD) activities and Federal agencies. The wide range of support is provided to 116 partner organizations from all four DoD military services, Homeland Security, and several Federal agencies. Major tenant units include the National Security Agency (NSA), the Defense Information School, Joint Field Support Center–U.S. Army Intelligence Security Command, the 70th Intelligence Wing (Air Force), the 902nd Military Intelligence Group (Army), Defense Information Systems Agency (DISA), Defense Mapping Agency (DMA), and EPA Research Laboratory.

1.5 NATIONAL PRIORITIES LISTING

The EPA placed Fort Meade on the National Priorities List (NPL) on 28 July 1998, after an evaluation of contamination due to past storage and disposal of hazardous substances at the Defense Reutilization and Marketing Office (DRMO), Closed Sanitary Landfill (CSL), Clean Fill Dump (CFD), and Post Laundry Facility. Contaminants at these sites included solvents, pesticides, polychlorinated biphenyls (PCBs), heavy metals, waste fuels, and waste oils. Based on the Army's conclusion that all actions necessary to protect human health and the environment have been conducted for the Tipton parcel, the EPA removed the Tipton parcel from the Fort Meade NPL listing on 1 November 1999. The Ft Meade NPL includes the entire installation, from fence line to fence line.

1.6 INFORMATION REPOSITORIES

Fort Meade environmental information can be found at Fort Meade's Environmental Management System Web site: <http://www.ftmeade.army.mil/directorates/dpw/environment/index.html>. The Administrative Record and the Information Repository are available at the Fort Meade Environmental Division (ED) office. Information can also be found at the Anne Arundel County Public Library – Odenton Regional Library.

1.7 REPORT ORGANIZATION

This report has four main sections and seven subsections. The four main sections consist of this Introduction section (Section 1.0), a description of each AOI (Section 2.0), a schedule of projected work and deliverables for each AOI (Section 3.0), and a bibliography of all references used to compile this SMP (Section 4.0). Section 2.0 is divided based on source funding and whether the AOI is open or closed and consists of seven subsections: IRP open AOIs, MMRP open AOIs, BRAC open AOIs, unassigned open AOIs, IRP closed AOIs, MMRP closed AOIs, and BRAC closed AOIs. This SMP also includes an appendix of approval letters for past SMPs.

Table 1-1: Crosswalk of Environmental AOIs at Fort Meade

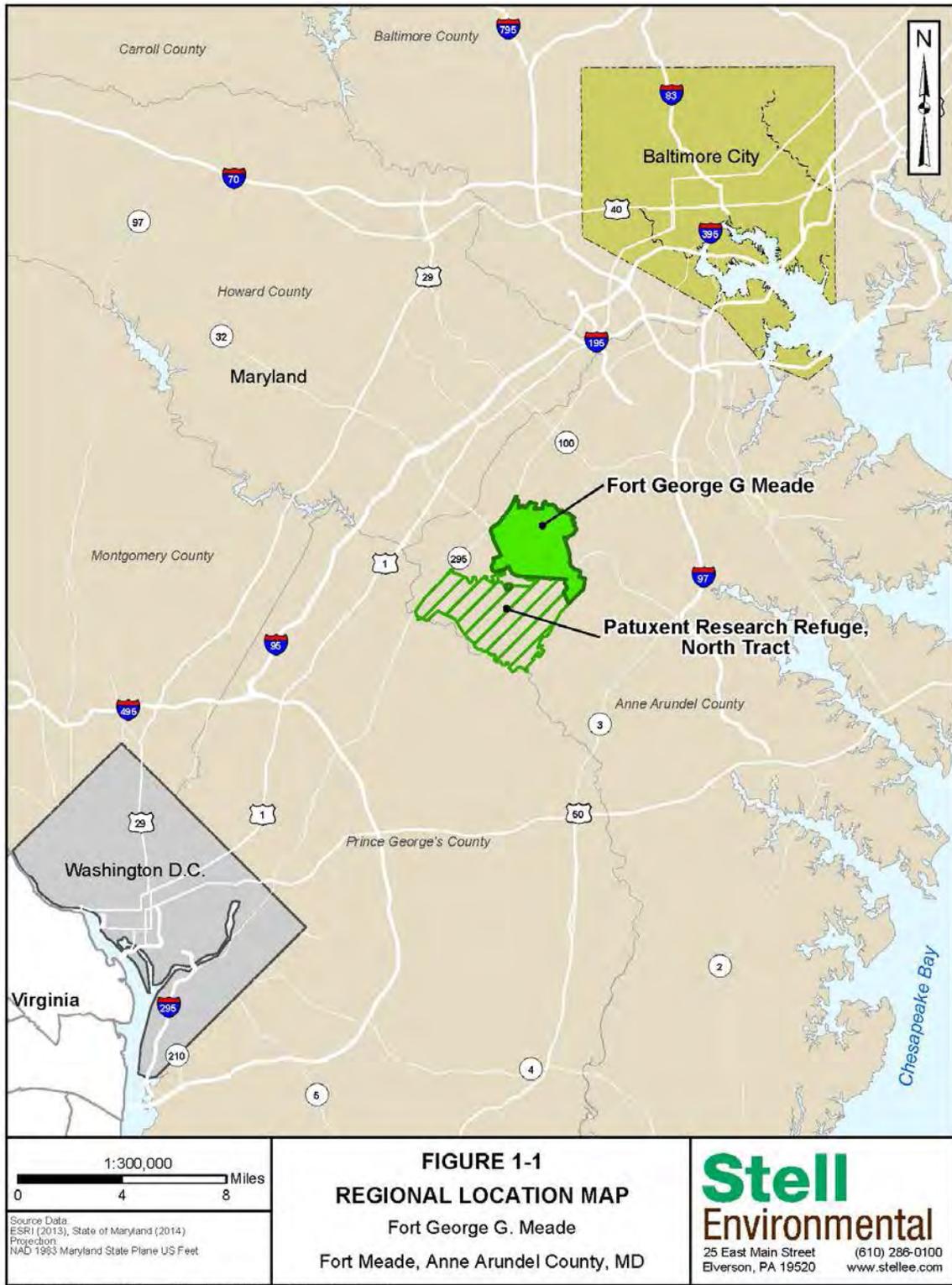
Operable Unit	FGGM Number	SWMU Number	Building Number	AOI Identifier	Status
OU-06	FGGM 03	SWMU 129 and 130	Building 8688	Water Treatment Plant	CLOSED
OU-02	FGGM 05	SWMU 112, 113, and 114	Building 8481	Former Troop Boiler Plant	CLOSED
OU-05	FGGM 07			DRMO Drum Site	OPEN
OU-07	FGGM 08			Comp Ammunition Supply Point (ASP) No. 1	OPEN
OU-08 TAP-OU	FGGM 10			Inactive Landfill 1 – Tipton – BRAC; part of the Tipton Airfield Parcel Operable Unit (TAP OU)	OPEN
OU-09	FGGM 11		Building 73	Gas Training Building	OPEN
OU-10	FGGM 13		Building 6621	Former Pesticide Shop Building	OPEN
OU-11	FGGM 14	SWMU 104	Building 6527	Control Hazardous Substance Storage Facility	CLOSED
OU-12	FGGM 17			Closed Sanitary Landfill	OPEN
OU-13	FGGM 18			ASP No. 2	OPEN
OU-14	FGGM 19			Advanced Wastewater Treatment Facility	CLOSED
OU-15	FGGM 20			Ordnance Demo Area – BRAC	OPEN
OU-16	FGGM 21			Medical Waste Site – BRAC	CLOSED
OU-17	FGGM 31			Inactive Landfill 3; also includes Inactive Landfill 2, listed under FGGM 007-R-01	OPEN
OU-18	FGGM 32			Fire Training Area; part of Tipton– BRAC	CLOSED
OU-19/ OU-4	FGGM 33		Former Building 2283	Battery Shop	OPEN
OU-20	FGGM 36	Non-SWMU 10 and 11	Buildings 4552 and 4553	Administrative/Photographic Laboratory	CLOSED
OU-20	FGGM 36	SWMUs 105, 106, 107, and 108	Building 6530	Photographic Laboratory Building	OPEN
OU-21	FGGM 37	SWMU 71	Building 2480	Kimbrough Army Hospital	OPEN
OU-22/ OU-4	FGGM 45	SWMU 42	Building 2220	Calibration Laboratory Building; both FGGM 45 and FGGM 91 are identified with Building 2220	OPEN
OU-04	FGGM 47	SWMU 59, 60	Building 2250	Post Laundry Facility	OPEN
OU-23/ OU-4	FGGM 49		Buildings 2286 and 2246	Department of Logistics (DOL), Buildings 2286 (also under FGGM 86) and 2246 (also under FGGM 92)	OPEN
OU-24/ OU-4	FGGM 51		Building 2217	Spill Site, Former Building 2217	OPEN
OU-25	FGGM 70	SWMU 150	Building 6513	Indoor Range, Former Building 6513	OPEN
OU-26	FGGM 71	SWMU 151 and 152	Building 6522	EX Indoor Range, Former Building 6522	OPEN
OU-27	FGGM 72			Petroleum, Oil, and Lubricants (POL) Storage Tanks – Tipton – BRAC	CLOSED
OU-28	FGGM 73		Buildings 85 and 90	Maintenance Shops Buildings 85 and 90 – BRAC	CLOSED
OU-29	FGGM 74	SWMU 1, 2, 3, 4, 5, 6, 7, 8, and 9	Buildings 71, 72, 72A	USAOC	OPEN
OU-30	FGGM 75			Underground Storage Tanks Prior to 1984	CLOSED

Operable Unit	FGGM Number	SWMU Number	Building Number	AOI Identifier	Status	
OU-32	FGGM 80		Helicopter Hangar #90	Helicopter Hangar 90 – BRAC Helicopter Hangar Area (HHA)	CLOSED	
OU-33	FGGM 81			CFD; (the CFD OU consists of the CFD and the Uncontrolled Waste Site, which is immediately south of the main dump. FGGM 001-R-01 is clean fill dump/Munitions and Explosives of Concern [MEC].)	OPEN	
OU-34	FGGM 82			Unexploded Ordnance (UXO) Removal – BRAC	CLOSED	
OU-1	FGGM 83	SWMU 153 and 154	Buildings 2047 and 2046	Former Trap and Skeet Range, Former Buildings 2246 and 2047	OPEN	
OU-35	FGGM 85			MEC Tipton Army Airfield – BRAC	OPEN	
OU-3	FGGM 87	SWMU 22, 23, 24, and 145	Buildings 1974, 1976, 1977, and 1978	Former Nike Fire Control Site	OPEN	
OU-4	FGGM 17			Monitoring Wells 125D and 126D	OPEN	
	FGGM 86	SWMU 65, 66, 67, and 70	Building 2286 and former Buildings 2285 and 2290	Former Motor Pool (MP) Maintenance Facility	OPEN	
	FGGM 88	SWMU 37	Building 2207, 2201, 2204, and 2206	Former Tank Maintenance Facility Shop-1	OPEN	
	FGGM 89	SWMU 39, 40, and 41	Building 2217	Former Tank Maintenance Facility Shop-2	OPEN	
	FGGM 90	SWMU 45, 46, 47, 48, 49, 50, 51, 52, 53, and 54	Buildings 2240, 2241, 2242, 2243, 2247, 2248, and 2249	Former Tank Cleaning Supply Warehouse	OPEN	
	FGGM 91	SWMU 42	Building 2220	Former Missile Repair Shop	OPEN	
	FGGM 92	SWMU 55, 56, 57, 58, 61, and 62	Buildings 2246, 2246D, 2244, 2245, and 2253	Former Heavy Gun Cleaning and Repair Shop	OPEN	
OU-36	FGGM 93			Manor View Dump, Including Incinerator and Old Landfill – 1938.	OPEN	
OU-37	FGGM 94			Trap and Skeet Range 17 – BRAC	OPEN	
OU-45	FGGM 95 (Former Landfill Sites)			Possible Dump Site A-1957 – Former Compliance Cleanup Site	OPEN	
				Possible Dump Site B-1957	OPEN	
				Possible Dump Site C-1957	CLOSED	
				Possible Dump Site D-1957	CLOSED	
				Possible Dump Site E-1957	OPEN	
				Possible Dump Site F-1957	CLOSED	
				Possible Dump Site G-1957	OPEN	
				Possible Dump Sites – 1970	OPEN	
				Site M - Parcel 1	CLOSED	
				Site M - Parcel 2	CLOSED	
			SWMU 131, 132, 133, 134, 135, 136, and 137	Buildings 21, 8860, 8870, 8880, 8881 8890, 8890A, and 8891	Site M - Parcel 3	CLOSED
					Site M - Parcel 4	CLOSED
					Site M - Parcel 5	CLOSED
			Site M - Parcel 6	CLOSED		
			Site M - Parcel 7	CLOSED		
			Site M - Parcel 8	CLOSED		

Operable Unit	FGGM Number	SWMU Number	Building Number	AOI Identifier	Status		
				Site M - Parcel 9	CLOSED		
				Inactive Landfill 4 (IAL4)	OPEN		
				Pre-WWII Laundry at USAOC	OPEN		
				Taylor Avenue Buried Drum Site	CLOSED		
				Waste Storage/Disposal Area - 1938	OPEN		
				Fill – 1988	OPEN		
				Small Pit – 1952	OPEN		
				Site Y	OPEN		
				Pershing Hill Elementary School Burn Pit Stockpile	OPEN		
OU-46	FGGM 96			Former MP-1/Wash Rack (WR)-4	OPEN		
				Former MP-2	OPEN		
				Former MP-3/WR-2	OPEN		
				Former MP-4	OPEN		
				Former MP-5; Possible Vehicle Storage Area – 1957	OPEN		
				Former MP-6	OPEN		
				Former MP-7/WR-6	OPEN		
				Former MP-8	OPEN		
				Former MP-9	OPEN		
				Former MP-10	OPEN		
				Former MP-11/-WR-7	OPEN		
				Former MP-12/-WR-8	OPEN		
				Former MP-13/-WR-9	OPEN		
				Former MP-14	OPEN		
				Former MP-17	OPEN		
				Former MP-18/-WR-12	OPEN		
				Former MP-19/-WR-13	OPEN		
				Former WR-3	OPEN		
				6th Street and Chisholm Ave.	OPEN		
				SWMU 010	Building 294	Directorate of Public Works (DPW) Entomology Department, Former MP	CLOSED
				SWMU 011	Building 546	Photography Lab	OPEN
				SWMU 012, 013, and 146	Building 940	MP, WR, and oil/water separator (OWS)	OPEN
				SWMU 014, 015, 016, 017, and 018	Building 1007	Army Reserve MP, Vehicle Maintenance, Motor Repair Shop, OWS, and WR, MP-15/WR-10	OPEN
				SWMU 019, 020, and 021	Building 1251	Associated WR and OWS	CLOSED
				SWMU 025, 026, 027, and 028	Building 2120C	Vehicle Storage and Maintenance, WR and OWS	OPEN
				SWMU 029 and 030	Building 2121	Vehicle Maintenance	CLOSED
				SWMU 031	Building 2122	Maintenance Facility, Former Building 2122	CLOSED
				SWMU 032	Building 2123	Maintenance Facility, Former Building 2123	CLOSED
				SWMU 033 and 034	Building 2124	Maintenance Facility	CLOSED
				SWMU 035 and 036	Building 2128	Vehicle Maintenance– MP-16/WR-11. Former Building 2128	OPEN
				SWMU 043, 044, and 147	Building 2227 and 2234	Maintenance Shop, WR, and OWS, Former Buildings 2227 and 2234	OPEN
		OU-4 / OU-46	FGGM 96	SWMU 038	Building 2213	Painting and Sheet Metal Shop, Former Building 2213	OPEN
OU-4 / OU-46	FGGM 96			Former WR-5	OPEN		
				Debris and Stain – 1975	OPEN		

Operable Unit	FGGM Number	SWMU Number	Building Number	AOI Identifier	Status
			Building 2266	Former Building 2266	OPEN
		SWMU 063 and 064	Building 2276	Furniture Repair Shop, Former Building 2276	OPEN
		SWMU 068	Building 2287	NSA MP Equipment and Chemicals Storage Shed, Former Building 2287	CLOSED
		SWMU 069	Building 2288	Paint Storage Shed, Former Building 2288	OPEN
OU-46	FGGM 96	SWMU 072	Building 2482	Boiler Plant	OPEN
		SWMU 073	Building 2484	Medical Supply/Administration	CLOSED
		SWMU 074	Building 2490	Medical Lab	OPEN
		SWMU 075 and 076	Building 2501	Maintenance	OPEN
		SWMU 077, 078, and 079	Building 2630	Dispatch, Storage, and Parking Area for Emergency Medical Units and WR Near Building 2630	OPEN
		SWMU 080, 081, 082, 083, 084, 085, and 086	Building 2724	Outdoor Recreation Equipment Rentals and WR	OPEN
		SWMU 087, 088, 089, 090, 091, 092, and 148	Building 2728	WRs, Recreational Equipment Storage, OWS, Recreational Vehicle (RV) Storage, and Maintenance Shop	OPEN
		SWMU 093	Building 2802	Dental Research Lab, Former Building 2802	CLOSED
		SWMU 094	Building 2804	Chemical Storage and Electron Microscopy Lab, Former Building 2804	CLOSED
		SWMU 095	Building 2805	Laboratory/Chemical Storage/Officers' Mess Hall, Former Building 2805	CLOSED
		SWMU 096 and 097	Building 2831	Dental Clinic, Former Building 2831	CLOSED
		SWMU 098	Building 3000	Screen Repair, and Industrial Shop	OPEN
		SWMU 099	Building 4411	Former Hospital	OPEN
		SWMU 100	Building 4554	Photo Lab	CLOSED
		SWMU 101 and 102	Building 4587	Motor Repair and Garage	OPEN
		SWMU 103	Building 4680	Service Station and Past Vehicle Repair Shop	OPEN
		SWMU 109	Building 8472	Dental Clinic	CLOSED
		SWMU 110 and 111	Building 8480	WR and OWS Southeast of Former Building 8480	OPEN
		SWMU 115, 116, and 116A	Building 8485	Vehicle Maintenance and Former WR-1	OPEN
		SWMU 117 and 118	Building 8486	Maintenance Shop	OPEN
SWMU 119 and 120	Building 8487	Vehicle Maintenance	CLOSED		
OU-46	FGGM 96	SWMU 121, 122, 123, 124, 125, 126, 127, 128, and 149	Building 8549, 8550, and 8551	Former MP and WR	OPEN
		SWMU 138	Building 9581	Wastewater Treatment Plant	OPEN
		SWMU 139 and 140	Building 6800	WR System for Most Recent Golf Course Club House	CLOSED
			Building 6865	WR System for Former Golf Course Club House	CLOSED
		SWMU 141 and 142		Privately Owned Vehicle WR	CLOSED

Operable Unit	FGGM Number	SWMU Number	Building Number	AOI Identifier	Status
		SWMU 143 and 144		Former OWS and WR	CLOSED
		Non-SWMU 1, 2, 3, 4	Buildings 2454, 2455, 2456, 2457	Administrative, Barracks, and Clinic	CLOSED
		Non-SWMU 5	Building 2801	Storehouse	CLOSED
		Non-SWMU 6, 7, 8	Buildings 2810, 2811, 2832	Lab and Barracks, Former Buildings 2810, 2811, and 2832	OPEN
		Non-SWMU 9	Building 4272	Cold Storage	OPEN
		Non-SWMU 12 and 13	Building 9802 and 9803	Barracks and Administrative	CLOSED
				Possible Vehicle Service Area A - 1943	OPEN
				Possible Vehicle Service Area B - 1943	OPEN
				Former Incinerator Building – 1943; 21½ Street	OPEN
				Oil Tanks	CLOSED
				Stained Soils Along 3 rd Street	OPEN
				Former Incinerator Site - Reece Road	OPEN
OU-38	FGGM 001-R-01			CFD MMRP	OPEN
OU-39	FGGM 002-R-01			High Explosive Impact and Disposal Area - BRAC	OPEN
OU-40	FGGM 003-R-01			Mortar Area MRS	OPEN
OU-40	FGGM 003-R-02			Training Area MRS	OPEN
OU-41	FGGM 004-R-01			Grenade & Bayonet Range A	CLOSED
OU-42	FGGM 005-R-01			Pistol Range A	CLOSED
OU-43	FGGM 006-R-01			Pistol Range B	CLOSED
OU-44	FGGM 007-R-01			Inactive Landfill 2	OPEN
	FGGM 008-R-01			Grenade & Bayonet Range B	CLOSED
Un-assigned AOIs				6-Acre Little Patuxent River Site	CLOSED
				Off-Post Groundwater Investigation - Nevada Avenue Area	OPEN
			8484	Grant Street at Building 8484 – Spill Notification	CLOSED
			1978	20 th Street at Route 175 Near Building 1978 – Spill Notification	CLOSED
			195	1st Street in Front of Building 195 – Spill Notification	CLOSED





2. AOI DESCRIPTIONS BY SOURCE FUNDING

2.1 INSTALLATION RESTORATION PROGRAM OPEN AOIs

2.1.1 FGGM 07 (OU-5) – DRMO DRUM SITE

Regulatory Driver: CERCLA

Environmental Investigations:

Remedial Investigation/Feasibility Study (RI/FS)	1994-2011
Focused Feasibility Study (FFS)	2007
FFS Technical Addendum on Pre-Design Plume Delineation and Data Collection	2010
RI/FS	2017
Proposed Plan (PP)	2017
Record of Decision (ROD)	2018
Remedial Action Work Plan (RAWP)/ Remedial Design (RD)	2019
Remedial Action Report (RAR)	2019

Contaminants of Potential Concern: Volatile organic compounds (VOCs)

Media of Concern: Groundwater

Site Location: Grid F5, at the intersection of Rock Avenue and Remount Road along the southern boundary of the installation.

Site Description: This AOI is approximately 9 acres and comprises the Covered Storage Facility (CSF) at the former salvage yard portion of the former Defense Property Disposal Office (DPDO). The CSF is also identified as the DRMO warehouse.

DPDO was an open storage/disposal area for automobiles, drums, water heaters, heating units, dry cleaning machines, spent battery transformers, pipe, and scrap metal.

Previous Studies: A total of 267 drums, 2 transformers, one high voltage box, and 3,500 tons of contaminated soil were removed in 1995 after the discovery of a few buried drums on 15 June 1995.

After completion of the environmental investigation, the site was completely paved, and the operation of the DRMO resumed along with the newly constructed CSF.



FGGM 07 - DRMO Drum Site
0 100 200 400 Feet

Current Use: DRMO

Current Status: The Army's contractor completed pre-design supplemental plume delineation and data collection in 2009 and submitted a Draft FFS Addendum Technical Report on Pre- Design Plume Delineation and Data Collection (Kemron/Arcadis, 2010) to EPA and MDE in March 2010. The Army completed additional RI fieldwork in 2011 to address outstanding EPA comments with the 2003 RI and Baseline Risk Assessment.

Cleanup/Exit Strategy: Future work includes addressing outstanding EPA comments on the 2009 RI/BRA, revised Final RI preparing a PP/ROD, and revising the 2007 FFS accordingly.

2.1.2 FGGM08 (OU-7) – Comp ASP No. 1

Regulatory Driver: CERCLA

Environmental Investigations:

Enhanced PA 1989
 SI 1992
 PA 1995-1996
 SI 1995-2011
 IRA 1998-1999
 Groundwater RI 2007
 The CSL Schedule:
 RD 2014-2016
 IRS 1998
 Remedial Action (Construction) [RA(C)] 2016-2020
 Remedial Action (Operation) [RA(O)] 2016-2020
 Long-Term Monitoring (LTM) 2020-2025

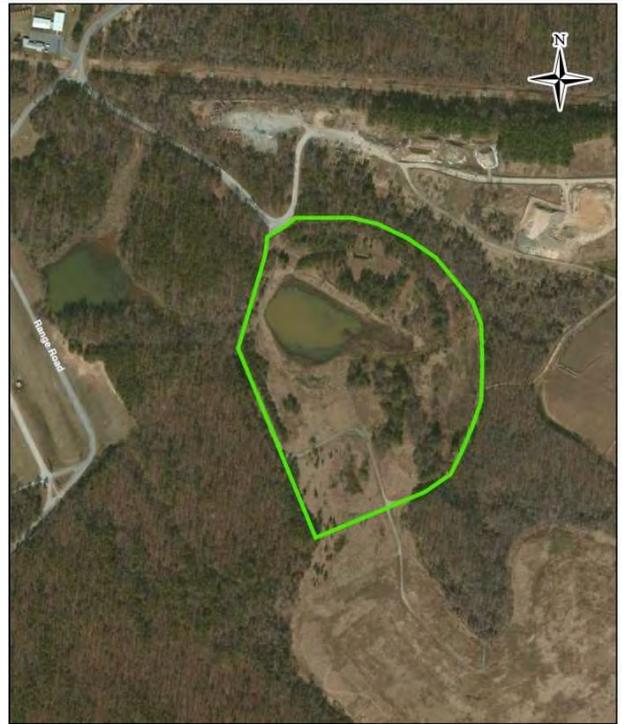
Contaminants of Potential Concern: Metals

Media of Concern: Soil

Site Location: Grids H5/I5 and H6/I6, in the middle of the CSL, in the southeastern portion of the cantonment area.

Site Description: This AOI is within the outline of the CSL (refer to Section 2.1.5). Chemical munitions used at FGGM included smoke grenades and Riot Control Agents (RCAs) for training purposes (Argonne, 1989). These items were stored at ASP 1. RCAs were stored in bulk (50-pound [lb] drums), canister, and capsule form. Smoke grenades contained a mixture of grained aluminum, zinc oxide, and hexachloroethane, as well as colored smokes. In the 1950s, an unknown number of chemical agent identification sets were stored in ASP 1. The final disposition of these sets is unknown.

Previous Studies: Over the course of previous investigations at this AOI, 21 surface soil samples, 6 subsurface soil samples, one surface water sample, and 6 sediment samples were collected and submitted for laboratory analysis. In addition, both shallow and deep groundwater at the CSL has been monitored for certain constituents, including explosives, and some wells are located near ASP 1.



FGGM 08 - Comp Ammunition Supply Point No. 1 (OU-7)
 0 200 400 800
 Feet

Soil samples were collected around the magazine locations (EM Federal, 2007). One surface and one subsurface soil sample were collected from each of the six former magazine locations in the former ASP area to assess the potential for soil contamination due to spills or leaks. Based on a risk analysis of the analytical results, concentrations are below site-specific action levels.

Current Use: Grass, trees, and a pond

Current Status: The current CSL FS recommended no further action (NFA) for this AOI.

Cleanup/Exit Strategy: This site has an IRA and Remedial Investigation (RI); closeout will require a Record of Decision (ROD). Since this AOI is inside the CSL, it will be included in the ROD for the CSL (refer to Section 2.1.5).

2.1.3 FGGM 11 (OU-9) – GAS TRAINING BUILDING, BUILDING 73

Regulatory Driver: CERCLA

Environmental Investigations:

Comprehensive Site

Assessment (CSA).....1997

PA.....1997

SI.....1997 to 2011

PA/SI2010 to 2015

Contaminants of Potential Concern: Cyanide and “CS” tear gas (ortho-chlorobenzylidene malononitrile)

Media of Concern: Soil and groundwater

Site Location: Grid H6, in the southeast portion of the installation, in the southwest portion of the CSL.

Site Description: Building 73 was formerly a Gas Training Building and is identified as a gas chamber on maps from 1976 (Defense Mapping Agency, 1976) and 1980 (USACE, 1980).

Building 73 has concrete floors and walls. Building 73 was used for tear gas training during WWI and respiratory protection training for RCAs from 1965 to 1979. Building 73 was later converted by the Defense Information School for urban facility inspection training.

Previous Studies: Seven wipe samples were collected from interior building material surfaces on 14 March 1997 and submitted for laboratory analysis. No tear gas components were reported in the analytical results.

Building 73 has concrete floors and walls, and the tear gas agent was only released inside the building. There is very low potential for the tear gas agent or its decomposition products to have entered the soil or groundwater surrounding Building 73.

Site investigation activities under the PA/SI occurred. Surface soil and groundwater samples were collected and analyzed for CS and cyanide.



FGGM 11 - Gas Training Building 73
0 40 80 160 Feet

Current Use: Vacant building

Current Status: Although no tear gas components were detected on interior building material surfaces, the soil and groundwater surrounding the building have not been tested. The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and groundwater for this AOI.

Building 73 has been properly decontaminated in a manner appropriate for CS, which is a strong irritant that is incompatible with strong oxidizers.

2.1.4 FGGM 13 (OU-10) – FORMER PESTICIDE SHOP BUILDING, FORMER BUILDING 6621

Regulatory Driver: CERCLA Environmental Investigations:

RI/FS.....	2004-2012
RD.....	2012-2013
RA(C).....	2013
5-Year Review.....	August 2016
RA(O).....	2013-2017
LTM.....	2017-2022

Contaminants of Potential Concern: VOCs, pesticides, and metals

Media of Concern: Soil and groundwater

Site Location: Grid F4, at the northwest corner of the intersection of York Avenue and Gordon Street.

Site Description: Between 1958 and 1978, former Building 6621 was used as a pesticide shop and maintenance facility. Pesticides stored at the building included malathion, diazinon, and baygon. Equipment stored at the building included lawn mowers, tractors, and other landscaping equipment. The building was demolished in 1996, and the area was graded.

Previous Studies: Site investigations were conducted after the building was demolished and the site regraded. Soil sampling results indicate that chlordane, alpha- chlordane, gamma-chlordane, 4,4-DDD, 4,4-DDE, 4,4-DDT, 2,4-D, heptachlor, dieldrin, arsenic, and mercury were detected above EPA Region 3 RBCs. Groundwater was not assessed during the site investigations.

In 2011, the Final RI determined that surface and shallow subsurface soils at the former Pesticide Shop were contaminated with pesticides (primarily chlordane) and arsenic. The pesticide contamination was more extensive than the arsenic contamination (Arcadis, 2011).

In 2010 additional RI work indicated that groundwater was contaminated with pesticides at low levels (primarily chlordane). Groundwater pesticide concentrations decreased substantially away from the pesticide handling area.

Tetrachloroethene (PCE) was also detected in two wells and also decreases in concentration away from the pesticide handling area to non-detect. The human health risk assessment (HHRA)



FGGM 13 - Pesticide Shop Building 6621
0 25 50 100 Feet

prepared as part of the RI concluded:

- The cancer risk estimates are above the upper end of the target cancer risk range (1×10^{-4}) and the cumulative non-cancer hazard estimates are above one for the future hypothetical resident.
- The cumulative non-cancer hazard estimates are greater than one for the future construction worker.

Current Use: Fenced site used for equipment storage

Current Status: The ROD was signed in September 2012 to implement soil excavation with off-site disposal, enhanced reductive dechlorination (ERD) with LTM of groundwater, and land-use controls. Implementation of the ROD began with excavation in December 2013. Excavation was completed in February 2014, and ERD was conducted in March 2014. LUCs were implemented in 2014. LTM was conducted quarterly for a year following excavation and is now conducted semi-annually.

Cleanup/Exit Strategy: The ROD remedy was implemented between December 2013 and June 2014. LTM follows the schedule established in the RD.

2.1.5 FGGM 17 (OU-12) – CLOSED SANITARY LANDFILL

Regulatory Driver: CERCLA/Resource Conservation and Recovery Act (RCRA) (for post closure LTM)

Environmental Investigations:

RI/FS2001-2014 (CSL), 2015 (Cell 3)

RD2014-2016

Final PP/ROD2016

RA(C).....2016-2020

RA(O).....2016-2020

LTM2020-2025

Contaminants of Potential Concern: VOCs, metals, and pesticides

Media of Concern: Groundwater

Site Location: Grids H5, I5, H6, I6, along the southeastern boundary of the installation, south of State Route 32.

Site Description: FGGM 17 was constructed as an unlined facility with no leachate collection system, initially designated as the Active Sanitary Landfill. Landfill operations were conducted from 1958 to 1976 using the trench fill method. FGGM 17 was divided into three cells; Cells 1 and 2 were capped with clay in 1992; Cell 3 is not a defined disposal area, so it was not capped or included in the RCRA permit. In 2013 it was discovered that Cell 3 may be larger than originally thought requiring additional RI work. As a result Cell 3 will be investigated at a later time and included in a separate CERCLA Decision Document as FGGM-97.

Surface water retention ponds are located along a small stream that bisects the site. A landfill-gas collection and treatment system operates along the eastern edge of the landfill to control emissions from the site.

ASP1 is located north of Cell 1 and west of Cell 2 within the CSL site boundary (Section 2.1.2).

Previous Studies: Soil borings were drilled to characterize the depth and nature of the waste materials. Surface soil samples were collected from the landfill cells to help assess potential exposure pathways. Groundwater and surface water samples are collected on a semi-annual schedule. The HHRA completed as part of the 2013 RI found:

- Surface/sub-surface soil, sediment, and surface water media from the CSL do not present unacceptable risk to human receptors on site or



off site under current and future land-use scenarios.

- Exposure to groundwater under the hypothetical future resident scenario exceeded the EPA target risk range and hazard level.
- An off-site investigation to further delineate the presence of benzene near the southeastern CSL boundary was conducted in March 2013 and 2014. Benzene was not detected above the Maximum Contaminant Level (MCL) during the investigation; therefore, the delineation is complete. However, arsenic was detected off-post at concentrations exceeding the MCL.

Current Use: Undeveloped and soil stockpile

Current Status: Semiannual groundwater and surface water monitoring and active methane collection are ongoing at the CSL. An FS for Cells 1 and 2 was finalized in December 2014 which evaluates alternatives for handling benzene and arsenic at the property boundary. The FS evaluated monitored natural attenuation (MNA), aquifer air sparging, and a permeable reactive barrier as potential treatment technologies.

Cleanup/Exit Strategy: A PP/ROD are being completed for the CSL, including ASP1, and will include land-use controls, an active treatment component, and continued post-closure care monitoring of the landfill. NFA is recommended for ASP1. An RI/FS will be completed for Cell 3.

2.1.6 FGGM 18 (OU-13) – ASP No. 2

Regulatory Driver: CERCLA

Environmental Investigations:

PA 1996

SI 2009-2011

PA/SI 2010-2015

Contaminants of Potential Concern: metals and explosives

Media of Concern: Soil

Site Location: Grid F6, in the north-central portion of the Patuxent Research Refuge-North Track (PRR-NT), south of the Tipton parcel.

Site Description: The 1989 Enhanced PA Report (Argonne, 1989) states: "the chemical munitions used at Fort Meade included smoke grenades and RCAs for training purposes. These items were stored at ASP1. Riot control agents were stored in bulk (50 lb. drums), canister, and capsule form. The smoke grenade includes a mixture of grained aluminum, zinc oxide, and hexachloroethane as well as colored smokes. In the 1950s, an unknown number of chemical agent identification sets were stored in ASP1 and transferred to ASP2. The final disposition of these sets is unknown." The site is currently vacant and unused.

Previous Studies: According to the IAP (Fort Meade, 2008c), a PA was completed for this AOI in 1996. According to the analytical results provided in the Environmental Restoration Information System (ERIS) database, one surface water sample, one sediment sample, and two soil samples were analyzed for VOCs, semivolatile organic compounds (SVOCs), metals, pesticides, herbicides, and PCBs. Based on a risk analysis of the analytical results, the concentrations were below site-specific action levels. However, the AOI was in use after this sampling, so additional sampling to characterize current conditions was conducted.

PA/SI activities were conducted. Surface soil samples were collected and analyzed for metals and explosives.



FGGM 18 - Comp Ammunition Supply Point No. 2 (OU-13)

0 250 500 1,000
Feet

Current Use: Grass, trees, roadways, and igloos

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends a Supplemental Site Investigation (SSI) be conducted for soils for breakdown products of the chemical agent identification set (CAIS) chemicals, cyanide, and chromium speciation for this AOI. The SSI will further assess this AOI and determine if the AOI will be recommended for NFA or will move forward to the RI phase of CERCLA. If required, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.7 FGGM 36 (OU-20) – PHOTOGRAPHIC LABORATORY, BUILDING 6530

Regulatory Driver: CERCLA

Environmental Investigations::

SWMU	1996
Historic Aerial Photograph Study.....	1996
RFA 3 rd Phase.....	1999
Data Gap Investigation.....	2002
PA/SI	2010-2015
Final PP/ROD.....	2016

Contaminants of Potential Concern: Metals

Media of Concern: Soil and groundwater

Site Location: Grid F4, in the southwestern portion of the installation, at the intersection of Taylor Avenue and Gordon Street.

Building 6530 is part of FGGM 36, an Auto Repair and Craft Center, which also includes Building 4553, which is discussed separately.

Site Description: Building 6530 is a vehicle maintenance facility (SWMU 105) with nearby OWS (SWMU 106) and WRs (SWMUs 107 and 108). Approximately one-third of the building is used as a craft center for installation residents involved in woodworking, ceramics, framing, and similar recreational activities. No chemicals except typical cleaners are kept in the crafts portion of the building. The auto repair facility stores oil, antifreeze, and Freon. Used oil cans, oil filters, and rags are stored in 55-gallon drums for eventual removal. All floor drains in the auto repair area flow to an OWS (SWMU 106), which also receives wastewater from two WRs (SWMUs 107 and 108) at the site. An 800-gallon waste oil above-ground storage tank (AST) is located at the northern exterior wall of the building.

Previous Studies: As part of the RCRA Facility Assessment (RFA) 3rd Phase, 16 direct-push borings were advanced around the building.

Three surface soil samples, 12 subsurface soil samples, and one groundwater sample were collected using a direct-push sampling rig. Based on a risk analysis of the analytical results, mercury, arsenic, and chromium concentrations exceed the site-specific action levels.

As part of the PA/SI, one groundwater monitoring well was installed, and groundwater samples were collected and analyzed for metals.



FGGM 36 (OU020) -- Building 6530 - Auto Repair and Craft Center
0 30 60 120 Feet

Current Use: Auto Repair and Craft Center

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and groundwater for this AOI.

2.1.8 FGGM 37 (OU-21) – KIMBROUGH ARMY HOSPITAL, BUILDING 2480

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
Sampling Visit	2000
PA/SI	2010-2015
Final PP/ROD	2016

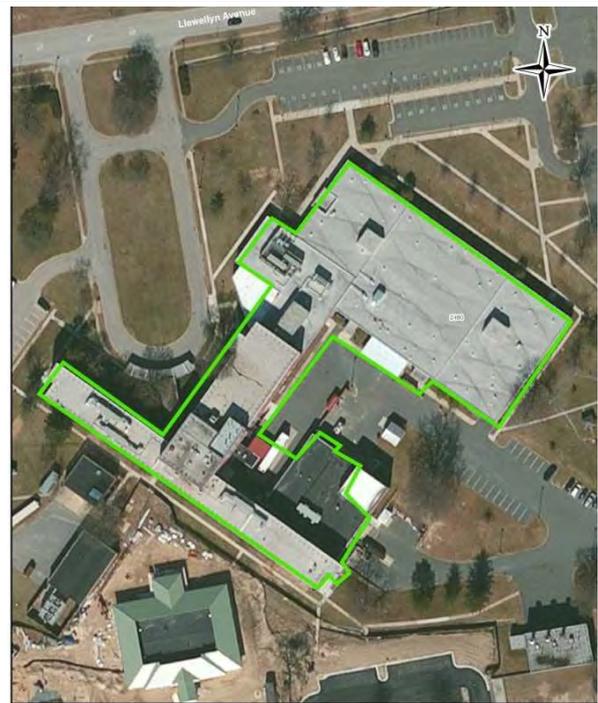
Contaminants of Potential Concern: Metals

Media of Concern: Soil and groundwater

Site Location: Grid H4, in the southeastern portion of the installation, approximately 100 feet southeast of the intersection of Llewellyn and Wilson Avenues.

Site Description: Building 2480 (SWMU 71) has been used as a hospital since its construction in 1968. Hospital operations were downsized to those of a clinic in the early 1990s. Chemicals stored in flammable storage cabinets and on shelves during the SWMU study included acetic acid, acetone, alcohol, phenol, trichloric acid, silver nitrate, hydrochloric acid, fixer and developer, iodine, peroxides, and sodium chloride. Areas of the hospital that use chemicals include the pharmacy, laboratories, x-ray rooms, emergency rooms, operating rooms, dental labs, podiatry rooms, and orthopedic rooms. Building 2480 routinely discharges waste from silver recovery units from photographic processing. Medical Maintenance properly disposes of the chemicals from the silver recovery (BCM, 1996). Any other discharge would go to the sanitary sewer.

Previous Studies: Over the course of previous investigations at this AOI, eight subsurface soil samples, and one groundwater sample were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic and chromium elevate the risk numbers above the site-specific action levels. As part of the PA/SI, one groundwater monitoring well was installed, and groundwater samples were collected and analyzed for metals.



FGGM 37 (OU-21) -- Kimbrough Army Hospital
 0 50 100 200 Feet

Current Use: Medical clinic

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and that this AOI move forward to the RI phase of CERCLA for groundwater (including radioactive cobalt). The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

Since the hospital is currently active, site closure will not be recommended until site use changes.

2.1.9 OU-4



Regulatory Driver: CERCLA

Environmental Investigations:

Please see the individual OU-4 AOIs for lists of previous investigations.

Contaminants of Potential Concern: VOCs, SVOCs, PCBs, pesticides, herbicides, TPH-diesel-range organics (DRO), TPH- gasoline range organics (GRO), polycyclic aromatic hydrocarbons (PAHs), fuel oil, metals, and herbicides

Media of Concern: Soil, groundwater, surface water, and soil gas.

Site Location: Grids G4, H4, G5, H5, H6, and I6, in the southeast portion of the installation.

Site Description: OU-4 comprises the following sites:

- FGGM 33: Battery Shop Building (Building 2283)
- FGGM 45: Calibration Laboratory (Building 2220)
- FGGM 47: Post Laundry Building (Building 2250)
- FGGM 49: DOL Buildings 2286 and 2246
- FGGM 51: Spill Site (Building 2217)

- FGGM 86: Former MP Maintenance Facility (Building 2286)
- FGGM 88: Former Tank Maintenance Facility Shop 1 (Building 2207)
- FGGM 89: Former Tank Maintenance Facility Shop 2 (Former Building 2217)
- FGGM 90: Former Tank Cleaning Warehouse (Building 2240)
- FGGM 91: Former Missile Repair Shop (Building 2220)
- FGGM 92: Former Heavy Gun Cleaning and Repair Shop (Buildings 2244, 2245, 2246, 2246D, and 2253)
- Monitoring Wells (MWs) 125d and 126d FGGM 17: Building 2213
- FGGM 96: Painting and Sheet Metal Shop, Former Building 2213
- FGGM 96: Building 2266
- FGGM 96: Furniture Repair Shop (Former Building 2276) (SWMUs 63 and 64)
- FGGM 96: Building 2287 (SWMU 68)
- FGGM 96: Paint Storage Shed (Building 2288) (SWMU 69)
- WR-5
- Debris and Stain – 1975

<p>Previous Studies: The precise location, history, and a summary of contamination of each site within OU-4 are presented in subsections 2.1.9.1 through 2.1.9.19. RI activities were completed during multiple phases between 2009 and 2014. The work extended across the overall OU-4 study area and included a series of cone penetrometer (CPT)/ membrane interface probe (MIP) borings, soil sampling using direct-push technology (DPT), vertical aquifer profiling (VAP) borings using roto-sonic drilling technology, deep and shallow monitoring well installations on- and off-post, numerous monitoring well groundwater sampling events and water level gauging, and completion of a vapor intrusion (VI) investigation involving sub-slab gas and indoor air sampling at OU-4 buildings. The HHRA concluded that in areas west of Huber Road (i.e. Buildings 2253, 2250, 2246, 2243, 2242, 2241, 2240, 2220) for the future trench construction worker scenario, three endpoint-specific hazard indices (cardiovascular system, immune system, developmental effects) exceed the target Hazard Index (HI) of 1, with exposures to TCE in shallow Upper Patapsco Aquifer (UPA)/Middle Patapsco Clay (MPC) groundwater as the primary contributor. Additionally, under a future off-post residential drinking water use scenario, the current concentrations in Lower Patapsco Aquifer (LPA) groundwater at upgradient on-post monitoring wells were defined as representative of future potential exposures to off-post residents who use groundwater for potable purposes (but without any consideration of the effects of treatment, dilution or attenuation in current on-post LPA groundwater concentrations). The cumulative cancer risk estimate exceeds the upper limit of USEPA's acceptable risk range of 1E-06 to 1E-04, with arsenic in on-post LPA groundwater identified as the risk driver. The endpoint-specific hazard estimates for MCP, cobalt, TCE, and PCE exceed USEPA's target HI of 1.</p>	<p>Current Use: Administrative, storage, industrial, and commercial</p> <p>Current Status: A Final RI/FS document presenting "final" corrective actions for OU-4 was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD are scheduled for winter 2015. A Non-Time Critical Removal Action (NTCRA) Work Plan proposing interim "active" remedial alternatives, including in-situ chemical injections (in the vicinity of FGGM 86 /Building 2286 and FGGM 96/Former Building 2276), installation and operation of an air sparge/soil vapor extraction system (at FGGM 47/Building 2250), and hydraulic containment (within the LPA south of Route 32), was approved in December 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The Interim Removal Action Reports (IRAR) were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.</p> <p>Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, including the sites listed above, includes continued O&M of the removal actions currently operating at OU-4 followed by the "final" corrective action agreed upon by all stakeholders in the ROD.</p>
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2.1.9.1 FGGM 33 (OU-19/OU-4) – BATTERY SHOP, FORMER BUILDING 2283

Regulatory Driver: CERCLA

Environmental Investigations:

PA	1991-1993
SI	1991-1994
IRA	1993-1994
CSA	2000
RI/FS	2002-2014
Well Closure Report	2003
PA	2010-2012
IRAR	2014
PP	2015
ROD	2016

Contaminants of Potential Concern: VOCs and metals

Media of Concern: Soil and groundwater

Site Location: Grid H5, in the southeast portion of the installation, approximately 500 feet west of the intersection of Morrison Street and Huber Road.

Site Description: Building 2283 was as a motor repair shop and storage facility (1941-1982) and a battery disposal facility (1982-1992) before being demolished in the mid-1990s.

From 1982 through 1985, battery acid was discharged directly to surface soil in a bermed area along the north wall of the former building (EA, 1994). An acid neutralization tank was installed in 1985.

In 1987, discharge of battery acid to the tank ended, but battery rinsing and cleaning operations continued in a sink in the northeast corner of the building; a drain pipe from the sink discharged to the surface soil outside the building.

Previous Studies: An IRA was completed in 1994 (EA, 1994). Over the course of previous investigations at this AOI, 59 surface soil samples, 67 subsurface soil samples, and 14 groundwater samples (plus one duplicate sample) were collected and submitted for laboratory analysis.

Current Use: Picnic pavilion and repelling tower with grass and tree cover.

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM 33, was submitted to EPA and MDE in December 2014; however comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS



FGGM 33: Battery Shop Building 2283
0 25 50 100 150 200 Feet

comments, the Draft Final PP and Draft Final ROD are scheduled for winter 2015. A NTCRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 33, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.2 FGGM 45 (OU-22/OU-4) – CALIBRATION LABORATORY, BUILDING 2220

Regulatory Driver: CERCLA

Environmental Investigations:

PA.....	2010-2012
RI/FS.....	2014
IRAR.....	2014
PP.....	2014
ROD.....	2016

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil and soil gas

Site Location: Grid H5, in the southeastern portion of the installation, approximately 150 feet east of the intersection of 3rd Street and Pepper Road.

Site Description: Building 2220 (SWMU 42) was constructed in the late 1950s or early 1960s and was used as a warehouse and troop training center. This site was used in the late 1960s as a missile repair shop, using solvents and producing solvent waste. Small amounts of cleaning solvent and gasoline were formerly stored in a shed outside the building. Two fuel oil underground storage tanks (USTs) were formerly located at the south side of the building; one removed in 1992, and the other removed and replaced in 1988 then removed in 1997. During the 1988 UST removal, corrosion holes were noted at the end of the tank. Building 2220 is also identified as FGGM 91, Former Missile Repair Shop groundwater.

Previous Studies: Over the course of previous investigations at this AOI, 4 surface soil samples, 6 subsurface soil samples, and 13 groundwater samples were collected and submitted for laboratory analysis.

Current Use: Administrative/storage

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM 45, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD are scheduled for winter 2015. A NTCRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation



FGGM 45 - Building 2220 - Calibration Laboratory



of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 45, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.3 FGGM 47 (OU-4) – POST LAUNDRY FACILITY, BUILDING 2250

Regulatory Driver: CERCLA

Environmental Investigations:

RI/FS	2014
IRAR	2014
PP	2015
ROD	2016

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil, groundwater, and soil gas

Site Location: Grid H5, approximately 400 feet northeast of the intersection of Rock Avenue and Huber Road.

Site Description: Building 2250 (SWMU 59 and 60) was constructed in 1941 and used as a laundry facility through 1991. Dry cleaning operations were introduced in the late 1960s. TCE, PCE, and carbon tetrachloride (CCl₄) were used during dry cleaning operations. Laundry and dry cleaning operations were discontinued in 1991, and the facility was converted to a recycling center. This AOI is being investigated under OU-4.

Previous Studies: In 1989, a preliminary soil investigation identified PCE in soil in an area believed to be a former drum storage area north of the building. Five shallow monitoring wells were installed near the building and first sampled in 1996. Surface water samples and sediment samples were collected from the retention pond near State Route 32 in 1998. Surface water in the swale east of Building 2250 was sampled in 1996, 1998, 1999, 2000, and 2013.

Current Use: Recycling center

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM 47, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments the Draft Final PP and Draft Final ROD are scheduled for winter 2015. A NTCRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation



FGGM 47 - Post Laundry
0 25 50 100 Feet

of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013.

The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 47, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.4 FGGM 49 (OU-23/OU-4) – DOL, BUILDINGS 2286 AND 2246

Regulatory Driver: CERCLA

Environmental Investigations:

Initial Delineation Report.....	2000
RI/FS	2014
IRAR.....	2014
PP.....	2015
ROD.....	2016

Contaminants of Potential Concern: VOCs, SVOCs, PCBs/pesticides, herbicides, TPH- DRO, fuel oil, and metals

Media of Concern: Soil, groundwater, and soil gas

Site Location: Grid H5. Building 2286 is north of Morrison Street and Building 2246 is east of Huber Street.

Site Description: FGGM 49 is part of OU-4 and includes Buildings 2286 and 2246. The soil and groundwater investigations and actions around Building 2286 are covered under FGGM 86. The soil and groundwater investigations and actions around Building 2246 are covered under FGGM 92. Both FGGM 86 and FGGM 92 are part of OU-4. These two buildings were initially delineated in 2000 (Versar, Inc., 2000b and 2000c). Further actions are required for soil and groundwater and will be conducted under FGGM 86 (for Building 2286) and FGGM 92 (for Building 2246).

Previous Studies: Over the course of previous investigations at this site, 6 subsurface soil samples and 2 groundwater samples were collected and submitted for laboratory analysis.

Current Use: Industrial and administrative

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM 49, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD are scheduled for winter 2015. A NTCRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013.



FGGM 49 - DOL Buildings 2286 and 2246
0 125 250 500 Feet

The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 49, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.5 FGGM 51 (OU-24/OU-4) – SPILL SITE, FORMER BUILDING 2217

Regulatory Driver: CERCLA

Environmental Investigations:

MDE Inspection Report	1988
SWMU Study	1996
MDE Site Closeout	2000
PA	2010-2012
RI/FS	2014
IRAR	2014
PP	2015
ROD	2016

Contaminants of Potential Concern: Soil

Media of Concern: Metals, PAHs, and VOCs

Site Location: Grid H5, in the southeastern portion of the installation, west of the intersection of Chisholm Avenue and 2nd Street.

Site Description: Two heating oil USTs were near Building 2217. UST #2217A was installed 1 June 1970 and removed 14 July 1988; UST #2217B was a 1,000-gallon capacity steel UST installed 3 August 1988 and removed 11 December 1997 (FGGM, 2010; Horne, 1994). The first tank was removed due to corrosion; there were holes at the tank end (FGGM, 2010). Free product was observed, the saturated soils were removed, and the soil removal project stopped upon finding a good clay area (FGGM, 2010).

Building 2217 was demolished in 2003 during which petroleum contamination was encountered underneath the concrete slab. The soil was investigated. The slab and soil beneath it were removed on 24 April 2007 and post-excavation samples were collected.

Previous Studies: Over the course of previous investigations at this site, 6 surface soil samples and 17 subsurface soil samples were collected and submitted for laboratory analysis.

Current Use: Grass field

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM 51, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD are scheduled for winter 2015. A NTCRA Work Plan proposing interim “active” remedial alternatives, including in-



FGGM 51 (OU-24) – Building 2217 (Spill Site)
0 25 50 100 Feet

situ chemical injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 51, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.6 FGGM 86 (OU-4) – FORMER MOTOR POOL MAINTENANCE FACILITY

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
RFA 3 rd Phase	1999
Site Investigations	2001 and 2002
Investigation Data Report	2005
RI/FS	2014
IRAR	2014
PP	2015
ROD	2016

Contaminants of Potential Concern: VOCs, SVOCs, herbicides, and metals

Media of Concern: Groundwater and soil gas

Site Location: Grid H5, near the intersection of Wilson and Morrison Streets.

Site Description: FGGM 86 consists of Building 2286 and Former Buildings 2285 and 2290.

Building 2286 (SWMUs 66 and 67) has been in use as a paint and body shop since the mid- 1980s. Chemicals used in the building include paints, solvents, thinner, antifreeze, acetylene, and argon gas.

Former Building 2285 (SWMU 65) was used for storing paints and solvents until 1991. It was then mostly empty until 1995, when the 55th Signal began using it to store cots, a lawnmower, and gasoline.

Former Building 2290 (SWMU 70) was used by Allied Trades to store paints, thinners, and enamels until 1988. It was empty from 1988 until it was also put to use by the 55th Signal to store equipment parts, wood, and metal. Buildings 2285 and 2290 were demolished in approximately 2000.

Previous Studies: Over the course of previous investigations at this site, 15 soil samples and 11 groundwater samples were collected and analyzed.

Current Use: Storage and administration

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM 86, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD are scheduled for winter 2015. A NTCRA Work Plan proposing



interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 86, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.7 FGGM 88 (OU-4) – FORMER TANK MAINTENANCE FACILITY SHOP-1

Regulatory Driver: CERCLA

Environmental Investigations:

RI/FS	2014
IRAR	2014
PP	2015
ROD	2016

Contaminants of Potential Concern: VOCs, SVOCs, PCBs, and metals

Media of Concern: Soil and groundwater

Site Location: Grid H5, approximately 150 feet southwest of the intersection of 1st Street and Chisholm Avenue.

Site Description: FGGM 88 includes Building 2207 (SWMU 37, DPW Storage and Receiving Warehouse), Building 2201 (DPW Storage and Supply Warehouse), Building 2206 (offices), Building 2204 (storage building), and Building 2200 (metal canopy for outdoor storage).

Constructed in 1918, Building 2207 was used as a tank maintenance facility prior to 1973. Since at least the mid-1980s, it has been used by the DPW as a receiving and storage facility.

Previous Studies: Over the course of previous investigations at this site, at least 17 soil samples and 11 groundwater samples were collected and analyzed.

Current Use: FGGM 88 is currently used for receiving materials for distribution to other facilities (main floor) and storing supplies, such as filters, light bulbs, and pipe clamps (upper floor).

The grounds are also used for storing construction materials, refrigerators, non-PCB-containing transformers, and fluorescent light bulbs.

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM 88, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD submittal are scheduled for winter 2015. A NTCRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and



FGGM 88 - Former Tank Maintenance Facility Shop-1
0 30 60 120 Feet

operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 88, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.8 FGGM 89 (OU-4) – FORMER TANK MAINTENANCE FACILITY SHOP-2

Regulatory Driver: CERCLA

Environmental Investigations:

Sampling visits	1999, 2000, and 2001
Delineation Report	2000
SI	2001
RI/FS	2014
IRAR	2014
PP	2015
ROD	2016

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Groundwater

Site Location: Grid H5, on 2nd and 3rd Streets between Pepper Road and Chisholm Avenue.

Site Description: FGGM 89 comprises the DOL Electric Shop Former Building 2217 (SWMU 39) and the DPW storage yard. Former Building 2217 was in the southeast corner of the site. A former WR (SWMU 41) and a former OWS (SWMU 40) were in the northwest corner of the site.

Constructed in 1918, Former Building 2217 was used as a tank maintenance facility until 1973. The associated WR was used to wash vehicles and construction equipment; wash water was discharged to the OWS and then to the sanitary sewer system. The WR and OWS were demolished and removed in 1999 or 2000.

Previous Studies: Over the course of previous investigations at this site, at least 32 soil samples and 30 groundwater samples were collected and analyzed.

Current Use: No permanent structures are located on site and the property is currently used for storage of vehicles and equipment.

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM 89, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD are scheduled for winter 2015.

A NTCRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical



FGGM 89 - Former Tank Maintenance Facility Shop-2

0 40 80 160 Feet

injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 89, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.9 FGGM 90 (OU-4) – FORMER TANK CLEANING SUPPLY WAREHOUSE

Regulatory Driver: CERCLA

Environmental Investigations:

RI/FS	2014
IRAR	2014
PP	2015
ROD	2016

Contaminants of Potential Concern: VOCs, SVOCs, PAHs, herbicides, pesticides, TPH-DRO, and metals

Media of Concern: Soil, groundwater, and soil gas

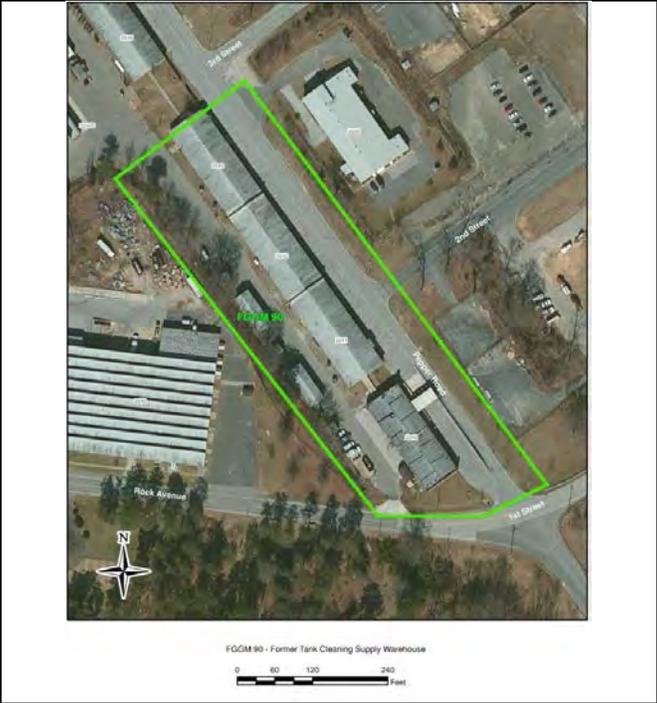
Site Location: Grid H5, comprising the DOL Storage Services and Supply Division Complex located in the northwest quadrant of the intersection of Pepper Road and Rock Avenue.

Site Description: The complex is in OU-4 and includes Buildings 2240 (SWMUs 45 and 46), 2241 (SWMUs 47 and 48), 2242 (SWMUs 49 and 50), 2243, 2247, 2248 (SWMUs 51 and 52), and 2249 (SWMUs 53 and 54). Building 2240 is a separate single-story brick structure. Buildings 2241, 2242, and 2243 are connected in sequence and are elevated on wooden piers. Buildings 2247, 2248, and 2249 are smaller, wooden garage-type structures located behind the larger buildings. Other features on the site include: propane storage pen (Building 2247A), flammable gas storage pen (Building 2248A), and an empty compressed gas storage pen north of Building 2249. A former 1,000-gallon AST storing No. 2 fuel oil located behind Building 2242 was removed in 1995.

Previous Studies: Soil and groundwater samples were collected and analyzed for Buildings 2240, 2241, 2242, 2248, and 2249.

Current Use: Building 2240 has been used as a storage and supply facility since its construction in 1934. Buildings 2241 and 2242 were constructed in 1918 and have always been used for receiving and short-term storage of supplies and materials before shipping. Buildings 2247, 2248, and 2249 are currently being used for assorted military administrative/commercial/storage activities.

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM 90, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs.



Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD submittal are scheduled for winter 2015. A NTCRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 90, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.10 FGGM 91 (OU-4) –FORMER MISSILE REPAIR SHOP, BUILDING 2220

Regulatory Driver: CERCLA

Environmental Investigations:

PA/SI	1998-1999
Sampling Visits	1999 and 2000
Soil Background Concentration Report (SBCR).....	2001
RI/FS	2014
IRAR.....	2014
PP.....	2015
ROD.....	2016

Contaminants of Potential Concern: VOCs, SVOCs, PCBs/pesticides, herbicides, TPH-DRO, fuel oil, and metals

Media of Concern: Soil, groundwater, and soil gas

Site Location: Grid H5, approximately 150 feet southeast of the intersection of Pepper Road and 3rd Street.

Site Description: Building 2220 (SWMU 42) is currently used for an electronic maintenance and calibration shop, but in the 1960s it was used as a missile repair shop, warehouse, and troop training center. Building 2220 is designated as FGGM 45, and is discussed separately. The FGGM 45 designation is for the building, while FGGM 91 is the groundwater at the site. Solvents, mineral spirits, cleaners, and lubricants were stored and used at the facility in the past. The site had two fuel oil USTs; one was removed in 1992, the other replaced in 1988 then removed in 1997. A 1-gallon spill of fuel oil reportedly occurred in 1993.

Previous Studies: Soil and groundwater samples were collected around Building 2220 as part of a 2000 SI and a 2000 Sampling Visit and analyzed for VOCs SVOCs, metals, TPH-DRO, herbicides and pesticides.

Current Use: Administrative/storage

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM 91, was submitted to EPA and MDE in December 2014, however; comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD submittal are scheduled for winter 2015. A NTCRA Work Plan proposing interim “active” remedial alternatives,



FGGM 91 - Former Missile Repair Shop
0 25 50 100 Feet

including in-situ chemical injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013.

The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 91, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.11 FGGM 92 (OU-4) – FORMER HEAVY GUN CLEANING AND REPAIR SHOP

Regulatory Driver: CERCLA

Environmental Investigations:

RI/FS	2014
IRAR	2014
PP	2015
ROD	2016

Contaminants of Potential Concern: VOCs, SVOCs, PCBs/pesticides, herbicides, TPH-DRO, fuel oil, and metals

Media of Concern: Soil, groundwater, and soil gas

Site Location: Grid H5, south of the intersection of Huber and Pepper Roads.

Site Description: FGGM 92 is currently the DOL Tactical and Support Vehicle/Heavy Equipment Maintenance Facility and includes Building 2246/2246D (SWMUs 55–58), Building 2253 (SWMUs 61–62), and two storage sheds (Buildings 2244 and 2245). Building 2246 was used as a heavy gun repair shop from 1934 until the mid-1980s, and a military tank repair shop in the past. Since 1992, the Director of Community Activities has used the facility for storage and maintenance of grounds-keeping equipment and supplies. Building 2253, constructed in 1934, and has been used for vehicle maintenance in the past. Prior to 1992, it was used by the DOL as a warehouse.

FGGM 92 contains an 800-gallon used oil AST that serves as a collection point for used oil from vehicle maintenance, an out-of-service WR, and an out-of-service fuel pump.

Previous Studies: Two investigations were conducted at the site of Building 2253 (CH2M HILL, 1999; Versar, 2001k).

Soil and groundwater samples were collected and analyzed during two investigations conducted at the Building 2246 site (Versar, 1999ah and 2000g).

Current Use: Maryland National Guard 32nd Civil Support Team

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM 92, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD submittal are



FGGM 92 - Former Heavy Gun Cleaning and Repair Shop.



scheduled for winter 2015. A NTCRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 92, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.12 FGGM 17 (OU-4) – MONITORING WELLS 125D AND 126D

Regulatory Driver: CERCLA

Environmental Investigations:

Sampling Visits 2004, 2005, 2008,
 2009, 2012, 2013 and 2014

Work Plan 2009

RI/FS 2014

IRAR 2014

PP 2015

ROD 2016

Contaminants of Potential Concern: PCE, CCl₄, and metals

Media of Concern: Groundwater

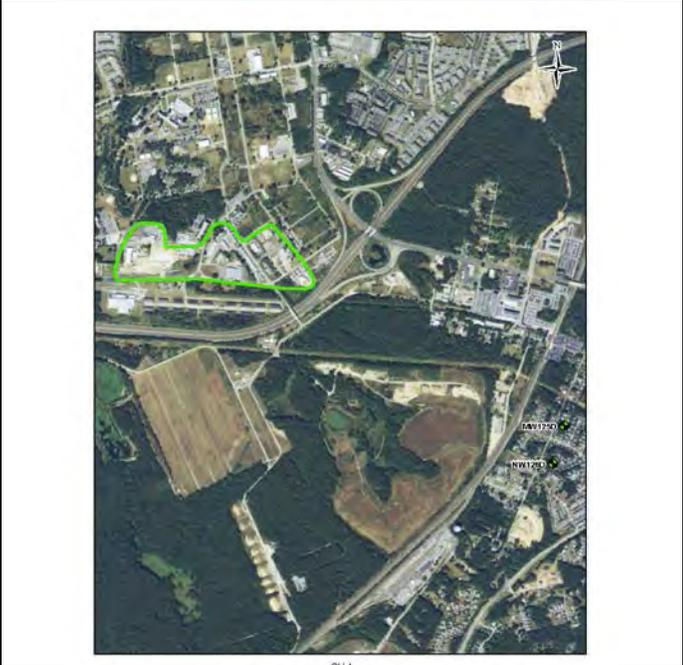
Site Location: Grid I6, two MW clusters (s-shallow and d-deep) 123s/125d and 124s/126d are located off post, east of the northern part of the CSL, at the intersection of North Patuxent and Dovetail Roads in Odenton, MD, in a residential area.

Site Description: Off-post wells MW-123s/125d and MW-124s/126d were installed as part of the CSL RI. PCE and CCl₄ detections above their respective MCLs were confirmed in off-post wells MW-125d and 126d in 2005. The CSL RI determined that the CSL is not the source of contamination in the Lower Patapsco Aquifer. Between 2005 and 2008, Anne Arundel County Health Department conducted an annual drinking water sampling program which included 13 residential drinking water wells downgradient from Fort Meade. All samples collected met primary EPA drinking water standards. Copper was detected above MCLs and lead was detected above its at-tap action level, but no VOC exceedances were detected in the wells tested by Anne Arundel County.

Previous Studies: MW-123s/125d and MW-124s/MW-126d were sampled in 2004, 2005, 2008, 2009, 2012, 2013, and 2014.

Current Use: Monitoring wells

Current Status: A Final NTCRA Work Plan approved in 2013 proposed interim active remedial alternatives for OU4 and the LPA Study Area, including installation and operation of a hydraulic containment system installed to enhance contaminant flushing in the LPA treating groundwater travelling in a southeast direction toward MW-125D and MW-126D. A Final RI/FS document presenting “final” corrective actions for OU-4 was submitted to EPA and MDE in



December 2014; however, comments from EPA are under resolution regarding COCs. Annual groundwater samples were collected from MW-123s/125d and MW-124s/126d and analyzed for VOCs in January of 2014. The MCL for CCl₄ was exceeded in both MW-125d and 126d. PCE, toluene, and total xylenes were detected in MW-123s and MW-124s; however, no MCLs were exceeded. A NTCRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 17 and the LPA, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.13 FGGM 96 (OU-46/OU-4) - PAINTING AND SHEET METAL SHOP, FORMER BUILDING 2213

<p>Regulatory Driver: CERCLA</p> <p>Environmental Investigations:</p> <p>PA 2010-2012</p> <p>RI/FS 2014</p> <p>IRAR 2014</p> <p>PP 2015</p> <p>ROD 2016</p> <p>Contaminants of Potential Concern: VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals</p> <p>Media of Concern: Groundwater</p> <p>Site Location: Grid H5. Former Building 2213 was located in the southeastern portion of the installation, in the northeast quadrant of the intersection of Pepper Road and Rock Avenue. SWMU 38 is located within the outline of OU-4.</p> <p>Site Description: Former Building 2213 was identified as a potential SWMU in 1996 (BCM, 1996) because it was formerly used as a painting, sheet metal and sign fabrication shop from the 1960s until it was demolished in the mid-2000s.</p> <p>Building 2213 was used to store small quantities of paints, lubricants, cleaners, and mineral spirits. The building also served as a drop-off point for oil-based and latex paints (unused and waste). The oil-based paints were stored in a hazardous waste locker on the northern side of the building. Latex paints were bulked into a 55-gallon drum and processed as non-regulated waste. Two 550-gallon heating oil USTs, formerly located along the southeast exterior wall, were removed in 1997.</p> <p>Previous Studies: Over the course of previous investigations at this AOI, four surface soil samples (plus one duplicate), eleven subsurface soil samples (plus two duplicates), and eight groundwater samples (plus two duplicates) were collected and submitted for laboratory analysis.</p> <p>Current Use: Grass and asphalt.</p> <p>Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses former Building 2213, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. The Draft Final PP and Draft Final ROD are scheduled for winter 2015. A NTCRA Work Plan</p>	 <p>Building 2213 - Sheet Metal and Sign Fabrication Shop</p> <p>0 25 50 100 Feet</p> <p>proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.</p> <p>Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses former Building 2213, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.</p>
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2.1.9.14 FGGM 96 (OU-46/OU-4) – FORMER BUILDING 2266

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study	1996
SI	2002
PA	2010-2012
RI/FS	2014
IRAR	2014
PP	2015
ROD	2016

Contaminants of Potential Concern: No sampling took place at this location.

Media of Concern: None identified

Site Location: Grid H5, in the southeastern portion of the installation, west of the intersection of Rock Avenue and Huber Road. Former Building 2266 falls within the geographical boundary of OU-4.

Site Description: Former Building 2266 was identified as an AOI because the 2006 FGGM IAP listed it as an AOI. No other information is available about past use that would qualify this building as an environmental AOI.

Previous Studies: This AOI was not identified in the *Solid Waste Management Unit Study* (BCM, 1996) or the EPA (1996) historic aerial photograph study of the installation. Past use of the building is unknown. No stains, stressed vegetation, debris, or solid waste were identified in this area. The 2006 FGGM IAP lists a 6 September 2002 SI Report for Building 2266.

That report is not available for review. The 1952 land use map shows a spur of the railroad near Building 2266 and between Buildings 2271 and 2272. These buildings were probably used as warehouses.

Current Use: Construction site, being developed as part of AWG HQ complex

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses former Building 2266, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD are scheduled for winter 2015. A NTCRA Work Plan proposing interim “active”



Former Building 2266
0 25 50 100 Feet

remedial alternatives, including in-situ chemical injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton.

The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses former Building 2266, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.15 FGGM 96 (OU-46/OU-4) – FURNITURE REPAIR SHOP, FORMER BUILDING 2276 (SWMUS 63 AND 64)

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....	1996
Historic Aerial Photograph Study.....	1996
Sampling Visit.....	2000
SI.....	2001
PA.....	2010-2012
RI/FS.....	2014
IRAR.....	2014
PP.....	2015
ROD.....	2016

Contaminants of Potential Concern: VOCs and metals

Media of Concern: Soil and groundwater

Site Location: Grid G5 and H5, in the southeastern portion of the installation, in the northeast corner of the intersection of Rock Avenue and Wilson Street. Former Building 2276 falls within the geographical boundary of OU-4.

Site Description: Building 2276 was constructed between 1910 and 1920 and used as a warehouse. Hazardous chemicals (paint thinners, adhesives, stains, and aerosols) were used and stored in small quantities at the facility. The building also contained a paint booth. The building was demolished in early 2012.

Previous Studies: Over the course of previous investigations at this site, 4 surface soil samples, 6 subsurface soil samples and 10 groundwater samples were collected and submitted for laboratory analysis.

Current Use: Area under development for construction of the AWG HQ complex and this location is now used for a storm water retention pond

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM 96/SWMUs 63 and 64, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD are scheduled for winter 2015. A NTCRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical



Building 2276 - Furniture Repair Shop
0 25 50 100 Feet

injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 96/SWMUs 63 and 64, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

**2.1.9.16 FGGM 96 (OU-46/OU-4) – NSA MP EQUIPMENT AND CHEMICALS STORAGE SHED,
FORMER BUILDING 2287**

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
RFA 3 rd Phase	1999
PA	2010-2012
RI/FS	2014
IRAR	2014
PP	2015
ROD	2016

Contaminants of Potential Concern: VOCs

Media of Concern: Groundwater

Site Location: Grid H5, in the southeastern portion of the installation, approximately 550 feet from the northeast corner of the intersection of Morrison and Wilson Streets.

Site Description: Former Building 2287, NSA MP Equipment and Chemicals Storage Shed (SWMU 68), was constructed in 1941 and used as a vehicle maintenance shed and later as a carpentry shop and storage facility for airplane platforms associated with the DOL Allied Trades. In 1996, the MP started storing equipment and small quantities of chemicals (lube oil, adhesives, and brake fluid) in the building. The building was demolished around 2000.

Previous Studies: Over the course of previous investigations at this site, six subsurface soil samples and two groundwater samples were collected and submitted for laboratory analysis.

Current Use: Parking lot

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses Former Building 2287, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD are scheduled for winter 2015. A NTCRA Work Plan proposing interim “active” remedial alternatives, including in- situ chemical injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013. The overall objectives



of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In- situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: This site has been approved by EPA for NFA. The cleanup/exit strategy for OU-4 as a whole, which encompasses Former Building 2287, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.17 FGGM 96 (OU-46/OU-4) – PAINT STORAGE SHED, FORMER BUILDING 2288

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....	1996
Historic Aerial Photograph Study.....	1996
RFA 3 rd Phase.....	1999
PA.....	2010-2012
RI/FS.....	2014
IRAR.....	2014
PP.....	2015
ROD.....	2016

Contaminants of Potential Concern: VOCs

Media of Concern: Groundwater

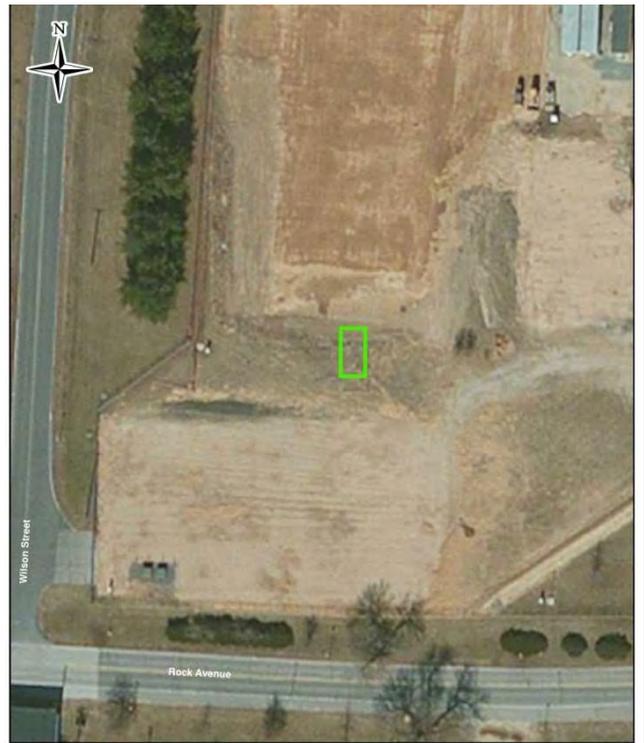
Site Location: Grid G5 and H5, in the southeastern portion of the installation, approximately 300 feet northeast of the intersection at Rock Avenue and Wilson Street.

Site Description: Former Building 2288 was a small, concrete-block storage building for Building 2276. The building was reportedly used in the past to store paints, thinners, and gasoline. Disposal practices in the building were unknown. Building 2288 is part of OU-4.

Previous Studies: Over the course of previous investigations at this site, three surface soil samples, four subsurface soil samples, and two groundwater samples were collected and submitted for laboratory analysis.

Current Use: Area under development for construction of the AWG HQ complex.

Current Status: This location is now grass covered. A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses Former Building 2288, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD are scheduled for winter 2015. A NTCRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December



Building 2288 -- Paint Storage Shed
0 30 60 120 Feet

2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses Former Building 2288, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.18 FGGM 96 (OU-46/OU-4) – FORMER WASH RACK 5

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996
 PA..... 2010-2012
 RI/FS 2014
 IRAR..... 2014
 PP..... 2015
 ROD..... 2016

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H5. Former WR-5 was located in the southeast portion of the installation, approximately 650 feet north east of the intersection of Morrison and Wilson Streets. AOI WR-5 falls within the geographical boundary of OU-4.

Site Description: WR-5 was identified as an AOI because the circa 1952 land use map (Anon., 1952) listed WR-5 at this location. The 1996 aerial photograph study (EPA) identified a WR-5 associated with Building 940, located in the northeastern portion of the installation. The circa 1952 land use map (Anon., 1952) did not identify a WR in the vicinity of Building 940; however, the naming of WRs in 1952 and 1996 may have been different. AOI WR-5 is part of OU-4.

Previous Studies: Over the course of previous investigations, three subsurface soil samples and one groundwater sample were collected.

Current Use: Parking lot

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM 96/WR-5, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments the Draft Final PP and Draft Final ROD are scheduled for winter 2015. A NTCRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013. The overall objectives of the



Wash Rack 5
 0 25 50 100 Feet

NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 96/WR-5, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.9.19 FGGM 96 (OU-46/OU-4) – DEBRIS AND STAIN – 1975

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study.....	1996
PA.....	2010-2012
RI/FS	2014
IRAR.....	2014
PP.....	2015
ROD.....	2016

Contaminants of Potential Concern: VOCs, SVOCs, metals

Media of Concern: Soil and groundwater

Site Location: Grid H5, in the southeast portion of the installation, south of Morrison Street, east of Wilson Street, and west of Huber Road. Debris and Stain 1975 falls within the geographical boundary of OU-4.

Site Description: The EPA (1996) study described this AOI in the 1975 aerial photograph as: “debris has been deposited in this area and a dark stain is visible adjacent to a small building. The stain is aligned along a drainage pathway that leads from the building northeast into the nearby woods.” The stain is not labeled on the 1975 aerial photograph (EPA, 1996). The write-up for the 1988 aerial photograph (EPA, 1996) says that staining is still present along the drainage way and solid waste is present in an accumulation of debris, although these features are not labeled on the photograph itself. The AOI is not labeled in the 1995 aerial photograph (EPA, 1996), and no debris or stains are visible.

Previous Studies: Over the course of previous investigations near this AOI, 15 subsurface soil samples (plus one duplicate sample) and two groundwater samples were collected and submitted for laboratory analysis.

Current Use: Area under development for construction of the AWG HQ complex.

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM 96/Debris and Stain 1975, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. Pending resolution of the RI/FS comments, the Draft Final PP and Draft Final ROD are scheduled for winter 2015. A NTCRA Work



Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an air sparge/soil vapor extraction system, and hydraulic containment, was approved in December 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the Lower Patapsco Aquifer in off-post areas of Odenton. The hydraulic containment system and air sparge/soil vapor extraction system were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and operations and maintenance activities are underway.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4 as a whole, which encompasses FGGM 96/Debris and Stain 1975, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the ROD.

2.1.10 FGGM 70 (OU-25) – INDOOR RANGE, FORMER BUILDING 6513

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
Historic Aerial Photograph Study	1996
Sampling Visit	2000
SI	2001
PA/SI	2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil and groundwater

Site Location: Grid F4, in the southern portion of the installation, west of the intersection of York Avenue and Simonds Street.

Site Description: Building 6513 was identified as a past SWMU in the 1996 SWMU study (BCM, 1996) because it was formerly used as an indoor shooting range, and disposal practices for the impact range were unknown. There were no spills or reported releases identified during the SWMU study (BCM, 1996). Building 6513 was demolished in 2001 after standing vacant (but locked) for several years. A 550-gallon heating oil UST was located outside the southeast corner of Building 6513. The UST was removed in January of 1997 (Versar, 2003).

Previous Studies: This AOI was not identified in the EPA (1996) review of historic aerial photographs; no stains, stressed vegetation, standing liquid, or other environmental concerns were identified at this location.

Over the course of previous investigations at this AOI, four surface soil samples (plus one duplicate sample), five subsurface soil samples, and five groundwater samples (plus one duplicate sample) were collected and analyzed. Based on a risk analysis of the analytical results, 1,2,4-trimethylbenzene and naphthalene elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, one groundwater monitoring well was installed, and groundwater samples were collected and analyzed for VOCs and SVOCs.



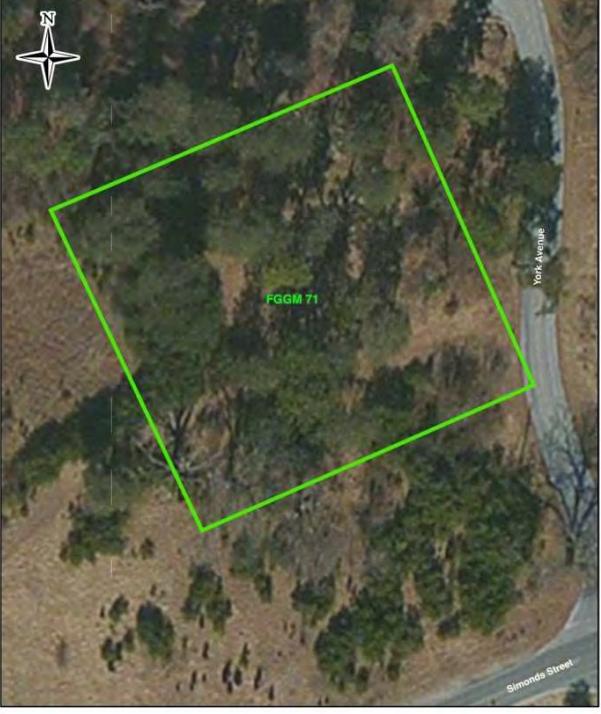
FGGM 70 (OU-25) – Indoor Range, Building 6513
0 25 50 100 Feet

Current Use: Parking lot

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and a SSI be conducted for groundwater for THP-DRO and total and dissolved metals, including hexavalent and trivalent chromium speciation, for this AOI. The SSI will further assess this AOI and determine if the AOI will be recommended for NFA or move forward to the RI phase of CERCLA. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.11 FGGM 71 (OU-26) – EX INDOOR RANGE, FORMER BUILDING 6522 (SWMUs 151 AND 152)

<p>Regulatory Driver: CERCLA</p> <p>Environmental Investigations:</p> <p>SWMU Study 1996</p> <p>Historic Aerial Photograph Study..... 1996</p> <p>Sampling Visits 2000</p> <p>PA/SI 2010-2015</p> <p>Contaminants of Potential Concern: Metals</p> <p>Media of Concern: Soil and groundwater</p> <p>Site Location: Grid F4, in the southern portion of the installation, 100 feet northwest of the intersection of York Avenue and Simonds Street.</p> <p>Site Description: Building 6522 (SWMUs 151 and 152) was identified as a past SWMU in the 1996 SWMU study (BCM, 1996) because it was formerly used as an indoor small arms target range, and disposal practices for the impact range were unknown. There were no spills or reported releases identified by BCM during the SWMU study (BCM, 1996). Building 6522 was demolished in the late 1990s. A 550-gallon heating oil UST was located outside the eastern wall of Building 6522. The UST was removed in August of 1995 (Versar, 2003).</p> <p>Previous Studies: This AOI was not identified in the EPA (1996) review of historic aerial photographs; no stains, stressed vegetation, standing liquid, or other environmental concerns were identified at this location.</p> <p>Over the course of previous investigations at this site, four subsurface soil samples and three groundwater samples were collected and analyzed. Based on a risk analysis of the analytical results, mercury, arsenic, and chromium elevate the risk numbers above the site-specific action levels.</p> <p>In 2013, as part of the PA/SI, one groundwater monitoring well was installed, and groundwater samples and surface soil samples were collected and analyzed for metals.</p>	 <p>FGGM 71 (OU-26) -- EX Indoor Range, Building 6522</p> <p>0 25 50 100 Feet</p> <p>Current Use: Parking lot</p> <p>Current Status: The Final PA/SI Report has been approved.</p> <p>Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and groundwater for this AOI.</p>
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2.1.12 FGGM 74 (OU-29) –USAOC, BUILDINGS 71, 72, AND 72A

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....	1996
Phase I Site Assessment.....	1994
RI.....	2013
FS.....	June 2014
PP.....	July 2014
ROD.....	September 2014

Contaminants of Potential Concern: Lead in soil; inorganics in shallow groundwater; and VOCs in shallow groundwater associated with OU4 and OU5

Media of Concern: Groundwater and soil

Site Location: Grid G5/H5. FGGM 74 is the USAOC parcel along the south border of Fort Meade. It is situated between State Route 32 and Rock Avenue and between Remount and Pepper Roads.

Site Description: This area was authorized by Congressional action in 1993 for transfer from the Department of the Army to the USAOC to accommodate long-term storage and service needs of the Library of Congress and other Legislative Branch agencies.

The USAOC parcel was contaminated by past Army activities. This area was evaluated in 1994 for feasibility of developing it to support Legislative Branch agencies. At the time of the study, the area contained temporary warehouses with several USTs nearby, buildings formerly used as the Fort commissary, and buildings associated with the Transportation Motor Pool (TMP). A stream (Rogue Harbor Branch) flows south through the site, and wetlands are present in the vicinity of the stream.

Previous Studies: A Phase I site assessment was performed as part of the 1994 development study (RK&K, 1994). The assessment identified VOCs, pesticides, PCBs, and metals detections in the OU-5 area. The assessment also identified petroleum hydrocarbon detections at the TMP and in the vicinity of several USTs in the warehouse area. Based on the results of the 1994 assessment, a Phase II investigation was recommended. Subsequent RI sampling and HHRA identified potential risks limited to (1)



hypothetical use of shallow groundwater for potable purposes related to inorganics detections, and (2) potential exposure to lead in subsurface soil in two small approximately 10-foot by 20-foot areas under a hypothetical regrading scenario.

Current Use: Currently, much of the improved areas of the USAOC parcel are used for storing documents. Approximately 10 acres of the extreme western part of the USAOC property are operated by the Army as a TMP.

Current Status: The USAOC RI Package was finalized in April 2013. The Final RI included an updated HHRA and an evaluation of background concentrations of inorganics in groundwater. The 2014 Final FFS evaluated alternatives to address inorganics in groundwater and lead in soil. The PP and ROD were finalized in July and September 2014, respectively. The selected remedy is hot spot soil excavation with off-site disposal. Groundwater is being addressed under OU-4 since there are no specific identifiable sources on the USAOC parcel (refer to Section 2.1.9).

Cleanup/Exit Strategy: Remedial action at USAOC is anticipated to start in 2015.

2.1.13 FGGM 83 (OU-1) – FORMER TRAP AND SKEET RANGE, FORMER BUILDINGS 2046 AND 2047

Regulatory Driver: CERCLA

Environmental Investigations:

Environmental Baseline Survey (EBS)..... 1998

Sensitive Receptor Survey and Risk Assessment 1999 and 2008

CSA 1999-2000

Corrective Action Plan (CAP)..... 2002

SI..... 2004

Supplemental Testing Proposal 2007

HHRA 2009

RI..... 2010

FS..... 2016

Final PP..... 2016

Final ROD..... 2017

RAWP/RD..... 2018

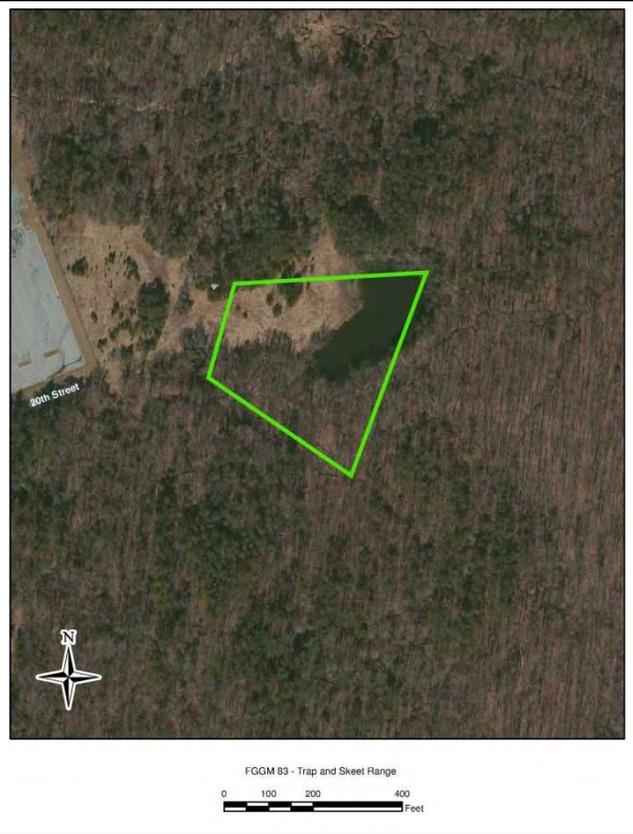
RAR..... 2018

Contaminants of Potential Concern: PAHs and metals

Media of Concern: Sediment, soil, and surface water

Site Location: Grid H2, at the eastern extent of 20th Street, approximately 1,400 feet east of the intersection with State Route 175.

Site Description: FGGM 83 is a former recreational trap and skeet range used by Fort Meade from the mid-1970s through 1994. The site contains a small concrete-block storage shed, grass-covered areas, a gravel access road, and a manmade pond (Kemron, 2008). The former range consisted of a firing line, skeet houses, and a manmade pond. Two former buildings (Buildings 2046 and 2047) were located near the western site boundary. Both buildings were demolished in 2001. Building 2046 was formerly used by Fort Meade for equipment storage during operation of the trap and skeet range. Building 2047 was identified in 1996 as SWMUs 153 and 154 because disposal practices for the range and other recreation sources were unknown.



Previous Studies: Over the course of previous investigations at this site, 49 shallow soil samples, sediment at 10 locations, surface water at 8 locations, and groundwater at 4 locations were collected and analyzed. In 2004, over 100 samples were collected from surface soil and shallow subsurface soil. In addition, 10 sediment samples and 7 surface water samples were collected and analyzed. Additional pond sediment samples were collected in 2010.

Current Use: Vacant and tree covered

Current Status: The Army’s contractor completed additional site sampling and analysis in 2010 and submitted an RI for EPA and MDE review in December 2010. Regulatory comments were received in March 2011. A revised Final RI Report was submitted and subsequently approved by the EPA.

Cleanup/Exit Strategy: Future work includes preparing an FS and PP/ROD.

2.1.14 FGGM 87 (OU-3) – FORMER NIKE CONTROL SITE, BUILDINGS 1974, 1976, 1977, AND 1978

Regulatory Driver: CERCLA

Environmental Investigations:

RI/FS	2008
Final Screening Level Ecological RA	2009
Final Addendum to Safe Work Plan	2010
Revised RI	2011-2013
RI/FS	2017
Final PP	2017
Final ROD	2018
RAWP/RD	2019
RAR	2019

Contaminants of Potential Concern: VOCs, SVOCs, PAHs, TCE, bis (2-ethylhexyl) phthalate, and metals

Media of Concern: Soil, groundwater, and indoor air

Site Location: Grid H2. FGGM 87 is the Directorate of Office Management complex located on Annapolis Road, approximately 200 feet south of the intersection of 20th Street and Annapolis Road.

Site Description: The site consists of four buildings that supported the former Nike missile fire control site from 1955 to 1972.

- Existing Buildings 1976 (SWMU 22) and 1978 (SWMU 24) are one-story, concrete-block, warehouse type structures, connected to each other by a narrow hallway.
- Building 1978 stored small quantities of hazardous materials.
- Building 1977 (SWMU 23) stored hazardous materials including, paints, gasoline, diesel fuel, and adhesives.
- Building 1974 (SWMU 145), formerly located east of Building 1976, was a generator building prior to its demolition sometime between mid- 1996 and early 1999.

Previous Studies: Over the course of previous investigations at this site, soil and groundwater samples were collected and analyzed. An RI/FS was submitted in January 2008. Regulatory comments were received in November 2008 and April 2009. Additional soil and groundwater samples were collected in a supplemental RI field effort in 2009.



FGGM 87 - Former Nike Control Site
0 100 200 400 Feet

Based on additional EPA comments, sediment sampling and analysis was conducted adjacent to the site in 2010.

Current use: Building 1976 is used as a supply warehouse to store electronic equipment and computers. Building 1978 accommodates administrative activities. Building 1977 is used for metal storage.

Current Status: A Revised RI Report was submitted for EPA and MDE review in May 2011. MDE sent a No Further Comment letter on the RI report in June 2011. EPA provided additional comments in August 2011. A revised Final RI Report was submitted and additional EPA comments were received. In March 2013 the RI Revision 03 was finalized, including Responses to EPA comments.

Cleanup/Exit Strategy: Future work includes a PP/ROD and development of a Revised FS.

2.1.15 FGGM 93 (OU-36) – MANOR VIEW DUMP INCLUDING INCINERATOR AND OLD LANDFILL - 1938

Regulatory Driver: CERCLA

Environmental Investigations:

PA/SI	2003
RI/FS	2003-2014
IRA	2005-2012
RA(C)	2007-2008
RA(O)	2008-2023
NTCRA	2011-2012
revised HHRA, FS, PP, and ROD	2014
RD	2015
RACR	2015
LTM	2014-2044

Contaminants of Potential Concern: Methane, metals, and VOCs.

Media of Concern: Groundwater, soil, and soil gas

Site Location: Grid G3, near the intersection of MacArthur Road and 2nd Corps Boulevard.

Site Description: The boundaries of the site include a group of residential housing units to the north (Phelps Avenue), 2nd Corps Boulevard to the south, Hayden Drive to the west, and MacArthur Road to the east. The developed land surrounding the former dump site includes the Potomac Place neighborhood and Manor View Elementary School. FGGM 93 was discovered in 2003 while moving earth for the housing privatization initiative at Fort Meade. Municipal waste from the 1940s (based on recovered, dated materials) was uncovered.

Previous Studies: Soil, groundwater, sediment, surface water, ambient/indoor air, and soil gas data were collected and analyzed.

The area of buried waste was temporarily fenced with barricade safety fencing, which was replaced with chain link fence when the landfill gas migration control system was installed in August 2005 (Plexus, 2008b). A passive vent trench was installed and later upgraded to a soil vapor extraction system with a blower to enhance vapor capture (Plexus, 2006). A NTCRA to remove 27,700 tons of nonhazardous methane-generating waste was completed in the summer of 2012, and the extraction system was turned off in August 2012. A revised HHRA, and FS were finalized in June 2014.



FGGM 93 - Manor View Dump
0 60 120 240 Feet

Current Use: Grass field

Current Status: The extraction system is shut off, and semi-annual methane monitoring is being performed as part of the LTM. The residents of Hayden Drive and Phelps Avenue in the Potomac Place neighborhood were relocated in December 2005, and the houses were reoccupied in 2015. The PP and ROD were finalized in June and September 2014, respectively. The selected remedy is maintenance of existing soil cover, LUCs, and LTM of methane and groundwater.

Cleanup/Exit Strategy: The alternative in the ROD includes monitoring and maintenance of the existing soil cover, methane monitoring, groundwater monitoring, and LUCs. The first Annual Soil Gas Monitoring Report was finalized in December 2014. The Revised Final RD was submitted in August 2015 and the RACR is currently under regulatory review.

2.1.16 FGGM 95 (OU-45) – FORMER LANDFILL SITES

2.1.16.1 FGGM 95 (OU-45) – POSSIBLE DUMP SITE A – 1957, FORMER COMPLIANCE CLEANUP SITE

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996

Geophysical Investigation 2004

PA/SI 2010-2015

Contaminants of Potential Concern: None identified

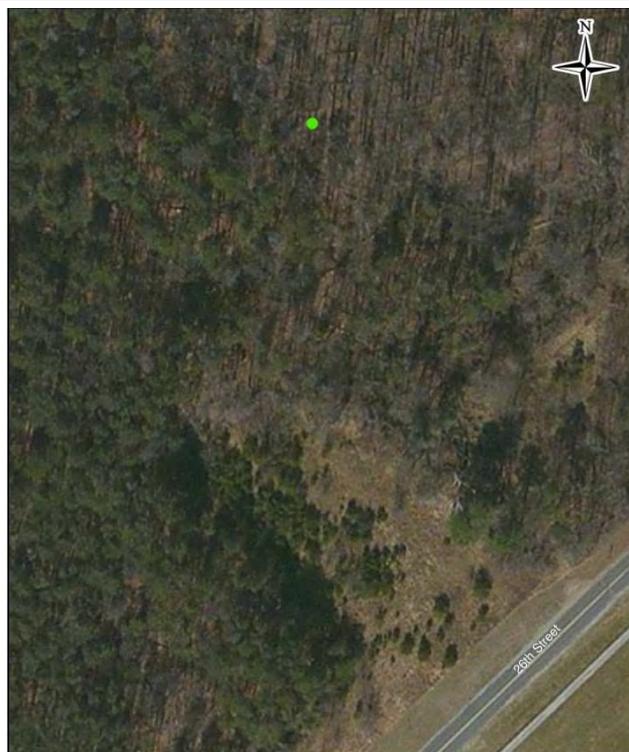
Media of Concern: Soils and groundwater

Site Location: Grid G1, near the northern border of the installation, 1,000 feet west of the Fort Meade Middle School.

Site Description: Possible Dump Site A – 1957 was identified as an AOI because the EPA photographic study of the installation (1996) listed “possible solid waste” at this location during an analysis of a 1957 aerial photograph. No activity was visible at this AOI in subsequent aerial photographs. The EPA study (1996) did not identify stained soils or stressed vegetation in this area in any of the historic aerial photographs.

Previous Studies: A geophysical investigation of Possible Dump Site A – 1957 provided little evidence that the AOI contains metallic or conductive buried waste or disturbed soil. A magnetic anomaly on the eastern perimeter of the geophysical survey was further investigated with ground penetrating radar (GPR), which “*showed a well-developed soil column with no anomalies, indicating that soil at this site is undisturbed.*” No buried drums were apparent in the soil column, and there does not appear to be much indication that something is buried here (Versar, 2004).

As part of the PA/SI, a test pit was excavated to investigate an anomaly. No elevated PID readings were recorded and no signs of staining were noted during excavation, therefore no soil samples were collected.



Possible Dump Site A - 1957
0 40 80 160 Feet

Current Use: Wooded

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for groundwater and a SSI be conducted for soils for VOCs, SVOCs, and metals, including chromium speciation for this AOI. The SSI will further assess this AOI and determine if the AOI will be recommended for NFA or will move forward to the RI phase of CERCLA. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.16.2 FGGM 95 (OU-45) – POSSIBLE DUMP SITE B – 1957

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996
 Geophysical Investigation 2004
 PA/SI 2007
 PA/SI 2010-2015
 Final PP/ROD 2016

Contaminants of Potential Concern: Metals and dioxins

Media of Concern: Soil and groundwater

Site Location: Grid F2, in the northern portion of the installation, 200 feet north of Clark Road and 700 feet west of the Clark Road/ Rockenbach Road intersection.

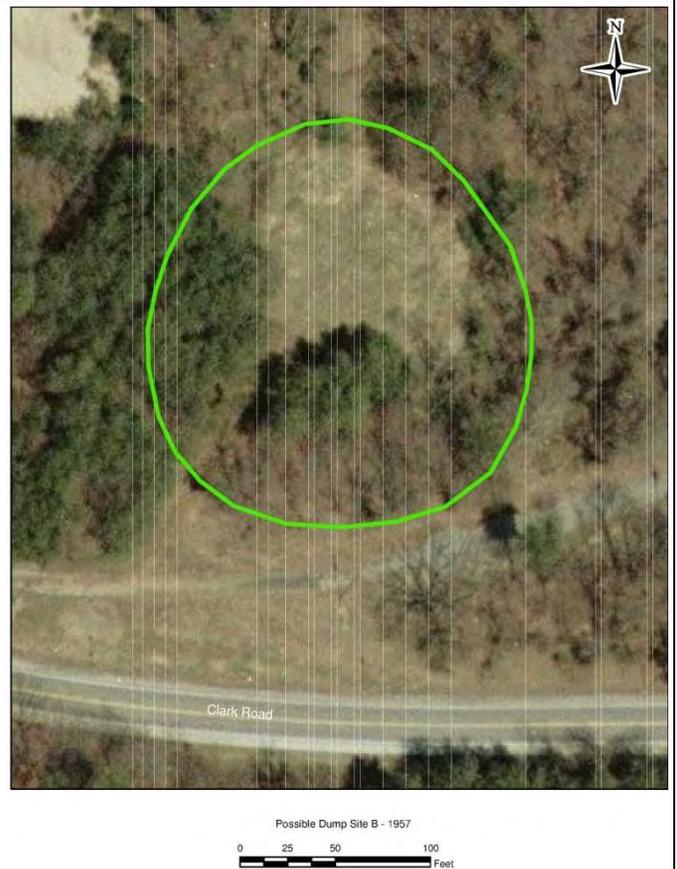
Site Description: Possible Dump Site B – 1957 was classified as a “solid waste/dump” by EPA during an analysis of a 1957 aerial photograph. The solid waste was no longer present in the 1963 aerial photograph (EPA, 1996). Bricks, steel pipes, and other construction debris were found at this AOI, but no drums were observed.

Previous Studies: A geophysical investigation (Versar, 2004a) revealed two areas of elevated terrain conductivity and numerous significant metal anomalies throughout the AOI. The GPR profiles indicated disturbed soil to a depth of at least 5 feet.

The 2007 PA/SI involved the excavation of six test pits and four direct push samples. Nine subsurface soil samples and two groundwater samples were collected and analyzed. Fill material approximately 1.5 feet thick and consisting of household trash and cinders was encountered in two of the direct-push borings.

Based on a risk analysis of the analytical results, iron, cobalt, arsenic, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, one subsurface soil sample was collected and analyzed for dioxins, and two groundwater monitoring wells were installed and groundwater samples were collected and analyzed for total and dissolved metals. Soil does not pose a risk at this AOI. The concentrations of chromium, cobalt, and thallium in groundwater cause excess risk at this AOI.



Current Use: Grass-covered area surrounded by trees. The cleared area is littered with numerous piles of soil and debris.

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and a SSI be conducted for groundwater for total and dissolved metals, including chromium speciation for this AOI. However, an RI/FS will be completed for this AOI. After the RI/FS, a PP and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.16.3 FGGM 95 (OU-45) – POSSIBLE DUMP SITE E – 1957

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996
Geophysical Survey 2004
PA/SI 2007
PA/SI 2010-2015

Contaminants of Potential Concern: Metals and dioxins

Media of Concern: Groundwater, sediment, and soil

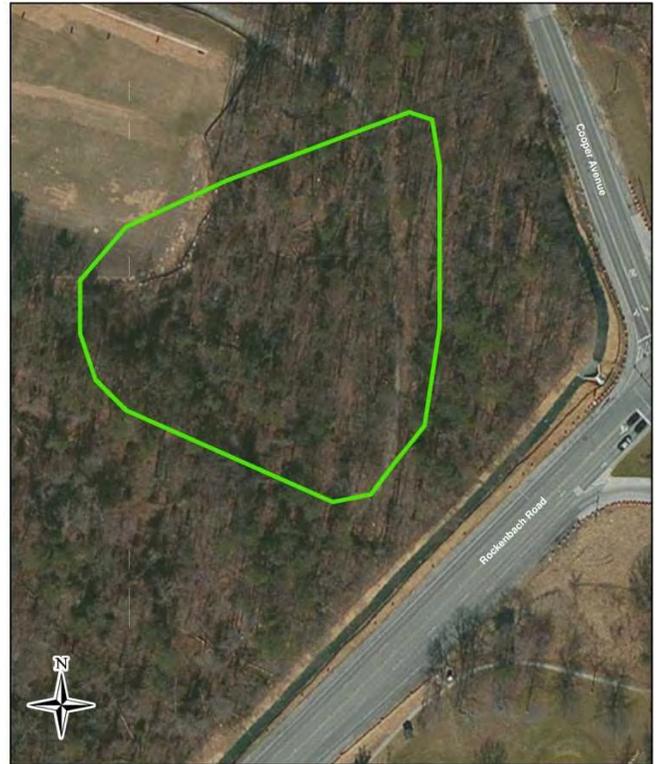
Site Location: Grid F2, in the northern portion of the installation, west of the intersection of Rockenbach Road and Cooper Avenue.

Site Description: Possible Dump Site E – 1957 was identified as an AOI because the EPA (1996) historic aerial photograph study of the installation listed “burning waste” at this location during an analysis of a 1957 aerial photograph. The EPA (1996) study did not identify stained soils or stressed vegetation in this area in any of the historic aerial photographs.

Previous Studies: A geophysical investigation of Site E – 1957 showed erratic, lower-intensity signals, but nothing consistent enough to signify extensive buried material (Versar, 2004). During the geophysical investigation, rusted 55-gallon drums, tires, and construction debris were found in a stream that runs through this AOI. Several groundwater seeps were noted along the stream’s southern bank.

Over the course of previous investigations at this AOI, five subsurface soil samples, four groundwater samples, three sediment samples, and three surface water samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, cobalt, manganese, iron, arsenic, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, soil samples were collected and analyzed for dioxins; a groundwater monitoring well was installed; and groundwater, sediment, and soil samples were collected and analyzed for metals.



Possible Dump Site E - 1957
0 50 100 200 Feet

Current Use: Forested

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils for this AOI; a SSI be conducted for groundwater for VOCs and total and dissolved metals including chromium speciation for this AOI; and this AOI move forward to the RI phase of CERCLA for sediments to conduct an ecological risk assessment. However, an RI/FS will be completed for this AOI. After the RI/FS, a PP and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.16.4 FGGM 95 (OU-45) – POSSIBLE DUMP SITE G – 1957

Regulatory Driver: CERCLA

Environmental Investigations:
 Historic Aerial Photograph Study.....1996
 Geophysical Survey2004
 PA/SI.....2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid E5, in the southwest portion of the installation, just southwest of the pumping station where the Little Patuxent River crosses Maryland Route 198.

Site Description: Possible Dump Site G – 1957 was identified as an AOI because the EPA (1996) study of the installation listed “possible dump” at this AOI during an analysis of a 1957 aerial photograph. In an analysis of a 1963 aerial photograph, the EPA labeled the AOI as a “re-vegetated dump site.”

Previous Studies: A geophysical investigation of Possible Dump Site G – 1957 provided little evidence that the AOI contains metallic or conductive buried waste. There is little geophysical evidence to suggest that this AOI is a former dump or landfill (Versar, 2004).

As part of the PA/SI, subsurface soil samples were collected and analyzed for VOCs, SVOCs, and metals.



Possible Dump Site G - 1957
 0 30 60 120 Feet

Current Use: Trees and grass
Current Status: The Final PA/SI Report has been approved.
Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils for this AOI.

2.1.16.5 FGGM 95 (OU-45) – POSSIBLE DUMP SITES – 1970

<p>Regulatory Driver: CERCLA</p> <p>Environmental Investigations: Historic Aerial Photograph Study 1996 PA/SI 2010-2015</p> <p>Contaminants of Potential Concern: None identified</p> <p>Media of Concern: Soils</p> <p>Site Location: Grid E2, in the northwest portion of the installation, east of the Baltimore-Washington Parkway.</p> <p>Site Description: Possible Dump Sites – 1970 were identified as an AOI because the EPA (1996) historic aerial photograph study of the installation listed “Possible Dump Location” at these locations during an analysis of a 1970 aerial photograph. The EPA (1996) study did not identify stained soils or stressed vegetation in this area in any of the historic aerial photographs.</p> <p>Previous Studies: No previous sampling or geophysical investigations have been conducted at this AOI.</p> <p>Possible Dump Site – 1970 has a long history of probable housing and farming. Agricultural activity may have been mistaken for dumping in the February 1970 aerial.</p> <p>As part of the PA/SI, test pits were excavated, and subsurface soil samples were collected and analyzed for VOCs, SVOCs, metals, pesticides, herbicides, TPH-GRO, TPH-DRO, and PCBs.</p>	 <p>Possible Dump Sites - 1970</p> <p>0 50 100 200 Feet</p> <p>Current Use: Wooded</p> <p>Current Status: The Final PA/SI Report has been approved.</p> <p>Cleanup/Exit Strategy: The Draft Final PA/SI Report recommends NFA for soils for this AOI.</p>
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2.1.16.6 FGGM 95 (OU-45) – INACTIVE LANDFILL 4 (IAL4)

Regulatory Driver: CERCLA

Environmental Investigations:

SI.....	1992
Sampling Visit.....	1992
Historic Aerial Photograph Study.....	1996
RI.....	1998
PA/SI.....	2010-2015
Final PP/ROD.....	2016

Contaminants of Potential Concern: VOCs, SVOCs, pesticides, PCBs, and metals

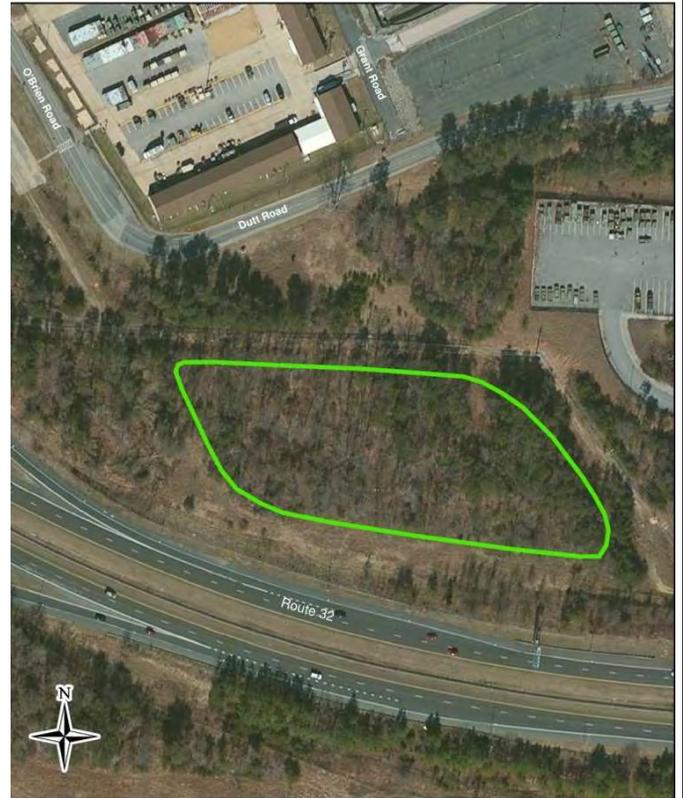
Media of Concern: Groundwater, soil, and sediment

Site Location: Grid F5, in the southwestern portion of the installation, north and adjacent to State Route 32 along the southwestern border of the installation.

Site Description: IAL4 is approximately 2 acres. Historic aerial photographs indicate that the AOI was active from the 1950s to the 1970s as a rubble disposal area.

Previous Studies: Although IAL4 is within current installation boundaries, it was initially characterized during a Site Inspection Study for the BRAC parcel (EA, 1992). Over the course of previous investigations at this AOI, two sediment samples (plus one duplicate) and nine groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.

As part of the PA/SI, test pits were excavated, and two subsurface soil samples were collected and analyzed for VOCs, SVOCs, metals, pesticides, herbicides, TPH-GRO, TPH-DRO, PCBs, and dioxins. The concentrations of arsenic, iron, and copper in soil cause excess risk at this AOI.



Inactive Landfill 4
0 70 140 280 Feet

Current Use: Wooded area

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for groundwater and sediments and this AOI move forward to the RI phase of CERCLA for soils. However, since this AOI will move forward to the RI phase of CERCLA for soils the monitoring wells will also be sampled to obtain current groundwater data. The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.16.7 FGGM 95 (OU-45) – PRE-WWII LAUNDRY AT USAOC

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....	1996
Phase I Site Assessment.....	1994
RI.....	2013
FS.....	June 2014
PP.....	July 2014
ROD.....	September 2014

Contaminants of Potential Concern: Metals and VOCs

Media of Concern: Groundwater

Site Location: Grid H5, in the southern portion of the installation, on the northern boundary of the USAOC parcel.

Site Description: The Pre-WWII Laundry Facility was identified as an AOI because the 1934 Special Military Map (Camp Meade, 1934) listed a laundry facility at this location. The laundry was also identified on a circa 1917 map of Camp Meade (Maryland Geological Survey, 1917) and a 1923 Special Military Map (Camp Meade, 1923). The laundry was demolished (date unknown), and the USAOC firefighting water tank now resides on the former laundry site. The EPA reviewed historic aerial photographs (from 1938 to 1995) of FGGM and found no stains, stressed vegetation, debris, solid waste, or other areas of environmental concern at this AOI (EPA, 1996).

Previous Studies: Two Geoprobe™ borings (DPT/GW9 and DPT/GW10) were advanced near this site in 2007. Soil and groundwater grab samples were collected. In 2010, two closely spaced wells (MW-102s and MW-101d) were installed just east of the site. Monitoring wells MW-102s and MW-101d were sampled in 2010, and volatile organics, most notably PCE, were detected at 3.82 µg/L and 139 µg/L, respectively.



Pre-WWII Laundry - USAOC
0 25 50 100 Feet

Current Use: USAOC firefighting water tank. The area is fenced.

Current Status: The USAOC PP and ROD were finalized in July and September 2014, respectively. The selected remedy is hot spot soil excavation with off-site disposal (refer to Section 2.1.12). Groundwater is being addressed under OU-4 since there are no specific identifiable sources on the USAOC parcel (refer to Section 2.1.9).

Cleanup/Exit Strategy: The groundwater cleanup/exit strategy for OU-4, which encompasses the Pre-WWII Laundry Facility area, includes continued operation and maintenance of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the OU-4 ROD.

2.1.16.8 FGGM 95 (OU-45) – WASTE STORAGE/DISPOSAL AREA – 1938

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study.....1996

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid I5, in the southeast corner of the installation, at the State Route 175/32 interchange.

Site Description: Waste Storage/Disposal Area – 1938 was identified as an AOI because possible waste storage or disposal was identified at this AOI during analysis of a 1938 aerial photograph. However, the EPA (1996) aerial photograph study of the installation did not identify this AOI until 1943.

Previous Studies: The EPA (1996) aerial photograph study of the installation identified a “Possible Dump or Waste Storage” area approximately 1,000 feet west of this AOI in the 1938 aerial. That site is being further studied under OU-4 as FGGM 88. A building and vehicles are observed at the AOI in the 1943 aerial photograph. The building number or past use is not known. The description for the 1952 aerial photograph states “This possible waste storage/disposal site has changed since 1943. It is now being used to store stockpiled raw materials. No evidence of waste material exists.” The outline of the eastern area appears on the 1963 aerial, but there is no discussion of this area in the text of the EPA (1996) report. A possible ground scar can be seen in the 1970 aerial; however, the EPA (1996) study does not address it. The description for the 1975 aerial photograph states “almost all of the raw materials previously stored at this site are removed.”

As part of the PA/SI, subsurface soil samples were collected and analyzed for VOCs, SVOCs, and metals.



WASTE STORAGE / DISPOSAL AREA- 1938

0 50 100 200 Feet

Current Use: This AOI is currently the on/off ramp for the State Route 175/32 interchange.

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils for this AOI.

In addition, groundwater in this area is being investigated under OU-4.

2.1.16.9 FGGM 95 (OU-45) – FILL – 1988

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid E4, near the southwest perimeter of the installation, north of Perimeter Road and west of O'Brien Road.

Site Description: Fill – 1988 is an AOI because the EPA (1996) aerial photographic investigation of Fort Meade labeled potential fill in this area in a 1988 historic aerial photograph; however, the potential fill was not discussed in the text of the EPA report. Fill was also labeled in this area on the 1995 aerial photograph, but it also was not discussed in the text of the report (EPA, 1996).

No stained soils or stressed vegetation were identified at this location or its surroundings on any of the historic aerial photographs. In the 1984 aerial photograph, this AOI and the adjacent square lot to the northwest are graded, possibly as part of site preparation for construction. By 1988, a building has been constructed on the adjacent lot to the west, and the "Fill – 1988" lot is covered with piles of dirt. By 1993, the AOI is graded, but by 1996, additional fill is brought in, most likely to complete leveling of the site. By 1999, the AOI is again leveled, and by 2002 a building and parking lot are constructed on this AOI.

Previous Studies: A historic aerial photograph study was completed. No previous sampling was undertaken.

As part of the PA/SI, subsurface soil samples were collected and analyzed for VOCs, SVOCs, and metals.



Fill - 1988
0 40 80 160
Feet

Current Use: Administrative, parking lot, and grass areas

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils for this AOI.

2.1.16.10 FGGM 95 (OU-45) – SMALL PIT – 1952

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

PA/SI 2007

PA/SI 2010-2015

Contaminants of Potential Concern: None identified

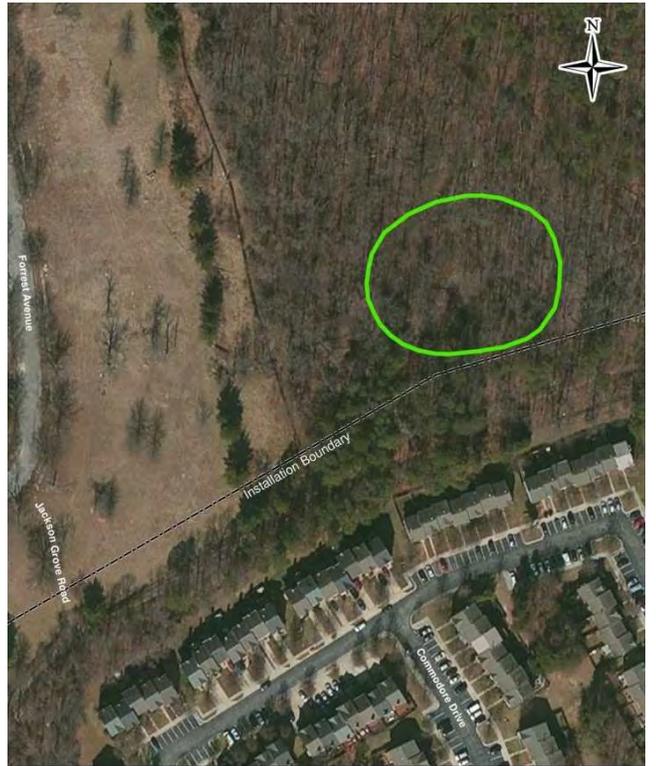
Media of Concern: None identified

Site Location: Grid H3, in the northeast portion of the installation, northeast of Forrest Avenue.

Site Description: Small Pit – 1952 was identified as an AOI because the EPA (1996) historic aerial photograph study of the installation listed a small pit on the 1952 aerial. The small pit was not specifically called out in the text of the EPA (1996) report. The small pit was also not called out in subsequent aerial photographs, nor did the EPA (1996) suggest it was filled in. There is no evidence of scaring, staining, or disturbance in any of the historic aerial photographs (EPA, 1996).

Previous Studies: No previous sampling was undertaken. This area was extensively walked as part of a PA/SI (URS Group, Inc., 2007d), and no signs of pits or stressed vegetation were identified. The EPA (1996) study did not identify stained soils or stressed vegetation in this area.

As part of the PA/SI, three surface and three subsurface soil samples were collected and analyzed for VOCs, SVOCs, metals, pesticides, herbicides, TPH-DRO, and TPH-GRO. The concentrations of cobalt in surface soil cause excess risk at this AOI



FGGM 95 - Small Pit - 1952
0 60 120 240 Feet

Current Use: Wooded

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA surface soils and subsurface soils for this AOI.

2.1.16.11 FGGM 95 (OU-45) – SITE Y

Regulatory Driver: CERCLA/MDE Solid Waste Program

Environmental Investigations:

MDE Site Number SC-O-12-SW-251 ___ 2012
Waste Characterization Report 2012
Draft Final Site Y Cleanup Plan..... 2013
Confirmatory Sampling Data Summary
Report..... 2013
PA/SI..... 2014-2015
Final Removal Completion Report..... 2015

Contaminants of Potential Concern: VOCs, metals, and pesticides

Media of Concern: Unknown (investigation pending)

Site Location: Grid H4, southwest of the intersection of 9th Street and Ernie Pyle Road.

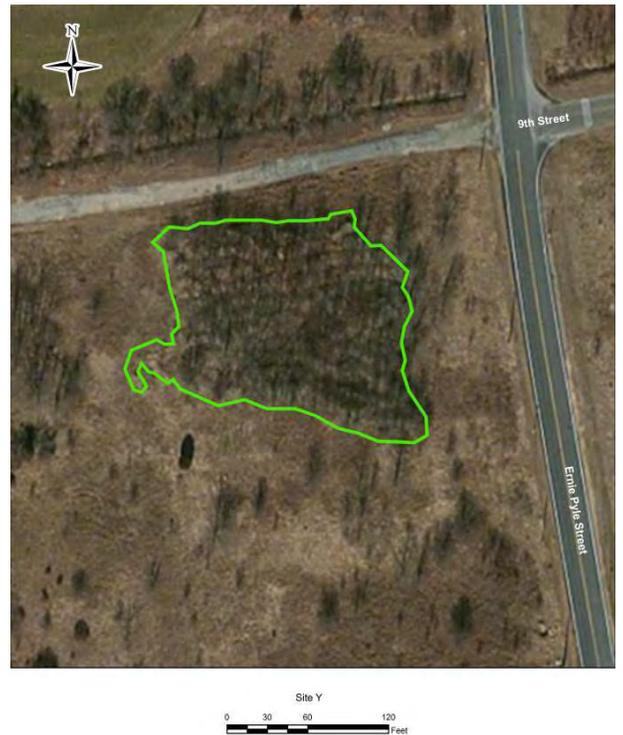
Site Description: Site Y was identified as an AOI when waste was observed on the ground surface in 2012. Site Y is a 0.9-acre, uncontrolled dumpsite where demolition debris and soil from an unknown source were placed between the years of 2000 and 2001.

In 2012, MDE issued a Site Complaint Number concerning the debris at Fort Meade Site Y.

Previous Studies: Site Y has undergone an investigation and remediation.

On 29 April 2013, soil samples were collected at Site Y to characterize the soil for waste disposal.

During the removal action at Site Y, two types of debris were observed at the site. The northern third of the site consisted primarily of construction debris; the southern two thirds contained what appeared to be landfill debris consisting of bottles, china, refractory brick, and demolition debris. There was an estimated 3,500 cubic yards of soil and demolition debris disposed of in the Site Y debris pile. After removal and disposal of the waste piles, surface soil samples were collected and analyzed. Confirmation sampling of soils remaining in place were collected and analyzed for SVOCs, VOCs, metals, mercury, herbicides, and pesticides.



Due to elevated benzo(a)pyrene levels at two separate locations, additional soils were excavated. Confirmation samples indicated that these two sources were removed but another exceedance of benzo(a)pyrene was found on the new south wall. It was determined that no further excavation was required to address benzo(a)pyrene.

Current Use: The debris at Site Y has been removed. This AOI is currently an open field.

Current Status: The PA/SI began in the summer of 2014. Soil and groundwater samples were collected and analyzed to assess current site conditions. The Final Removal Completion Report was submitted in February 2015.

Cleanup/Exit Strategy: Complete the PA/SI, including the site-specific risk analysis, and either recommend this AOI for NFA or move forward to the RI phase of CERCLA.

2.1.16.12 FGGM 95 (OU-45) – PERSHING HILL ELEMENTARY SCHOOL BURN PIT STOCKPILE

<p>Regulatory Driver: CERCLA/MDE Solid Waste Program</p> <p>Environmental Investigations:</p> <p>Burn Pit 2009</p> <p>RI/FS 2015</p> <p>Contaminants of Potential Concern: Metals and DRO. Possibly dioxin and furan.</p> <p>Media of Concern: Soil stockpile.</p> <p>Site Location: Grid I5, north of Lokus Road in the northern portion of the CSL.</p> <p>Site Description: A burn pit was discovered during the reconstruction of Pershing Hill Elementary School. The pit was probably dug in the late 1950s or early 1960s during the construction of the original school to place and burn the trees that were cut for the school construction.</p> <p>Previous Studies: The pit was sampled for a variety of parameters, including petroleum hydrocarbons, dioxins, and furans, with trace levels of dioxins and furans detected along with low levels of petroleum hydrocarbons.</p> <p>The contents of the burn pit were removed and stockpiled on-site (approximately 25,000 cubic yards). The stockpile exceeded site capacity and was transported to a permitted and controlled location at the CSL. The soil stockpile has been re-sampled and disposed at an approved off-post facility.</p>	 <p>Current Use: Soil stockpile</p> <p>Current Status: An RI/FS will begin in the fall of 2015. Soil and groundwater samples will be collected and analyzed to assess current site conditions.</p> <p>Cleanup/Exit Strategy: Complete the RI/FS and move on to the PP and ROD phases of CERCLA.</p>
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2.1.17 FGGM 96 (OU-46) – FORMER MOTOR POOLS, WRS, AND BUILDINGS

2.1.17.1 FGGM 96 (OU-46) – FORMER MP-1/WR-4

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid G4, in the south-central portion of the installation, west of Cooper Avenue, east of Griffin Avenue, south of Bundy Street, and north of Williams Road.

Site Description: MP-1/WR-4 was identified as an AOI because they were identified on the circa 1952 land use map (Anon., 1952). The EPA (1996) study identified a vehicle service and storage area at this location on the 1963 and 1970 aerial photographs. The write-up for the 1975 aerial photograph specifically states “No Longer a Vehicle Service and Storage Area, Now a Parking Lot” for this location.

Previous Studies: Potential environmental concerns were not cited for this location in the EPA report. There are no recent or historical indications of releases or contamination at this AOI. Also, there is no evidence of scarring, staining, or disturbance in any of the historic aerial photographs. This site may have been used as a parking lot for a MP and for washing cars (WR) for a limited time. It is unknown if vehicles were serviced at any of the former buildings at this AOI. Three of the four buildings have been removed, and most likely the soils have been graded. No stains or stressed vegetation was observed on any of the historic aerial photographs of this location.

There has been no previous environmental sampling at MP-1/WR-4. As part of the PA/SI, 14 surface soil samples were collected and analyzed for VOCs, SVOCs, and metals. The concentrations of PAHs (Benzo(a)pyrene, Benzo(a)fluoranthene, Benzo(a)anthracene) in surface soil cause excess risk at this AOI.



MP-1 and WR-4
0 75 150 300
Feet

Current Use: Parking lot and grassy area

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends this AOI move forward to the RI phase of CERCLA for soils. The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.2 FGGM 96 (OU-46) – FORMER MP-2

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996

Soil and Groundwater Quality

Investigation..... 2009

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals

Media of Concern: Soil and groundwater

Site Location: Grid G4, in the south central portion of the installation, west of Griffin Avenue and north of Simonds Street.

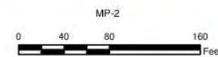
Site Description: MP-2 was identified as an AOI because it was identified on the circa 1952 land use map (Anon., 1952). This AOI was also identified in the EPA (1996) review of historic aerial photographs, which shows a vehicle service and storage area at this location on the 1963, 1970, 1975, and 1988 aerial photographs.

Previous Studies: Stains, standing liquid, or stressed vegetation was observed at this AOI in the 1963, 1970, 1975, and 1988 aerial photographs (EPA, 1996). Presently, the AOI does not exhibit signs of staining, runoff, or stressed vegetation.

Over the course of previous investigations at this AOI, five surface soil samples, five subsurface soil samples (plus one duplicate sample), and four groundwater samples were collected and submitted for laboratory analysis.

The soil and groundwater quality investigation (USACHPPM, 2009) concluded that the results of the soil and groundwater analytical data suggest there has not been a contaminant release at the Former MP-2 area. However, the four areas of historic surficial staining have not been fully evaluated.

As part of the PA/SI, four subsurface soil samples were collected and four groundwater monitoring wells were installed and sampled. All samples were



analyzed for VOCs, SVOCs, TPH-GRO, TPH-DRO, and metals. Soil does not pose a risk at this AOI. The concentrations of benzo(a)pyrene and chromium in groundwater cause excess risk at this AOI.

Current Use: Grassy field/vacant lot

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and groundwater for this AOI.

2.1.17.3 FGGM 96 (OU-46) – FORMER MP-3/WR-2

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996

PA/SI 2010-2015

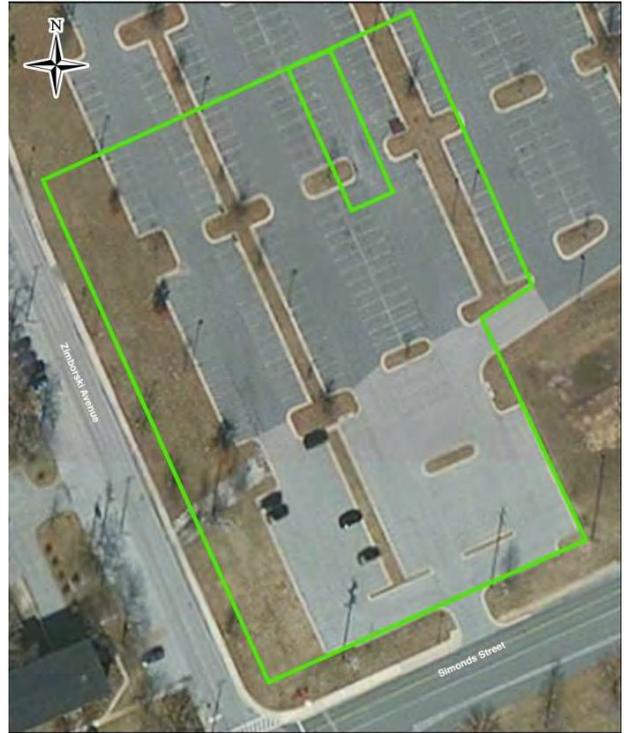
Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid F4, east of Zimborski Avenue, north of Simonds Street, in the southern portion of the installation.

Site Description: MP-3/WR-2 was identified as an AOI because it was listed as a motor pool on the circa 1952 land use map (Anon., 1952). The EPA (1996) report shows a vehicle service and storage area at this location on the 1963, 1970, 1975, and 1988 aerial photographs. The write-up for the 1995 aerial photograph specifically states “Former Vehicle Service and Storage Area” for this location. The EPA study did not report any environmental conditions for this location. There are no recent or historical indications of releases or contamination at this AOI. Also, there is no evidence of scarring, staining, or disturbance in any of the historic aerial photographs. This site may have been used as a parking lot (MP) and for washing cars (WR) for a limited time. The potential for contamination in this area is minimal. It is unknown if vehicles were serviced at any of the former buildings in this AOI. All buildings have been removed, and the soils have been excavated and graded.

Previous Studies: As part of the PA/SI, surface soil samples were collected and analyzed for VOCs, SVOCs, and metals.



MP-3 and WR-2
0 30 60 120 Feet

Current Use: Parking lot with grassy areas surrounding it

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils for this AOI.

2.1.17.4 FGGM 96 (OU-46) – FORMER MP-4

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid F5, in the southern portion of the installation, south of Dutt Road, west of Zimborski Avenue.

Site Description: MP-4 was identified as an AOI because it was listed as a motor pool on the circa 1952 land use map (Anon., 1952). The EPA (1996) study shows a vehicle service and storage area at this location on the 1943 and 1947 aerial photographs. Potential environmental concerns (e.g., stained soil or stressed vegetation) were not cited for this location in the EPA (1996) report.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, five surface soil samples were collected and analyzed for VOCs, SVOCs, and metals.



Current Use: Grassy area with several trees along the edges of the AOI

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils for this AOI.

2.1.17.5 FGGM 96 (OU-46) – FORMER MP-5, POSSIBLE VEHICLE STORAGE AREA - 1957

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

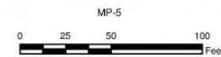
Media of Concern: Soil and groundwater

Site Location: Grid G5, in the southern portion of the installation, approximately 50 feet northeast of the intersection of Taylor Avenue and Hodges Street.

Site Description: MP-5 was identified as an AOI because it was listed as a motor pool on the circa 1952 land use map (Anon., 1952). This AOI was also identified in the EPA (1996) historical aerial photograph study of the installation as “Possible Vehicle Storage Area - 1957,” which shows a vehicle service and storage area at this location on the 1957, 1963, and 1975 aerial photographs. The outline of the AOI changed during those periods.

The 1963 aerial photograph summary identifies ground staining with a drainage pattern that flows east into an adjacent wooded area. The 1988 aerial photograph write-up states that there is a persistent drainage pattern leading from a small building to the adjacent woods, but no stains or stressed vegetation are noted. The 1995 aerial photograph summary specifically states “Former Vehicle Service and Storage Area” for this location.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, two surface soil samples and two subsurface soil samples were collected plus two groundwater monitoring wells were installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. The concentrations of chromium and iron in soil and arsenic, iron, naphthalene, and manganese in groundwater cause excess risk at this AOI.



Current Use: Grassy field and trees

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for subsurface soils for this AOI, a SSI be conducted for surface soils for chromium speciation; and this AOI move forward to the RI phase of CERCLA for groundwater. The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.6 FGGM 96 (OU-46) – FORMER MP-6

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid H5, in the southeastern portion of the installation, at the State Route 175/32 interchange.

Site Description: MP-6 was identified as an AOI because it was listed as a motor pool on the circa 1952 land use map (Anon., 1952). According to the 1952 map, there are no buildings within the outline of this MP. This AOI was not identified in the EPA (1996) historic aerial photograph study of the installation. Since there were no former buildings at this AOI, it is unlikely that vehicles were serviced at this AOI. All surrounding buildings were removed by 1993, and the soils have been excavated and graded. No stains or stressed vegetation was observed on any of the historic aerial photographs of this location. The buildings were gone at the time of the 1996 SWMU study (BCM, 1996), so the SWMU study did not cover this portion of the installation.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, two subsurface soil samples were collected and analyzed for VOCs, SVOCs, and metals.



Current Use: Grassy area and part of State Route 175/32 interchange

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends a SSI be conducted for soils for chromium speciation for this AOI. The SSI will further assess this AOI and determine if the AOI will be recommended for NFA or move forward to the RI phase of CERCLA. If required, the RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.7 FGGM 96 (OU-46) – FORMER MP-7/WR-6

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996

PA/SI 2007

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H4/5, in the southeastern portion of the installation, northeast of Chamberlain Avenue, southwest of State Route 175, southeast of 4th Street, and northwest of State Route 32. SWMU 10 - Building 294 is in the northwest corner of this AOI. SWMU 10 is being addressed separately.

Site Description: Staining was observed at this AOI in the 1943, 1957, and 1963 aerial photographs (EPA, 1996). In the write-up for the 1995 aerial photograph, the EPA (1996) no longer identifies this AOI as a vehicle service and storage area.

Previous Studies: Over the course of previous investigations at this AOI, five subsurface soil and three groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, iron, vanadium, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, six surface soil samples were collected and analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals; two subsurface soil samples were collected and analyzed for metals; six groundwater monitoring wells were installed and groundwater samples were collected and analyzed for VOCs, TPH-DRO, TPH-GRO, total metals, and dissolved metals. Soil does not pose a risk at this AOI. The concentrations of chromium, cobalt, thallium, arsenic, iron, manganese, nickel, aluminum, and cadmium in groundwater cause excess risk at this AOI.



MP-7 and WR-6
0 100 200 400
Feet

Current use: Building 294 and a grass field

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and this AOI move forward to the RI phase of CERCLA for groundwater. The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.8 FGGM 96 (OU-46) – FORMER MP-8

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996
Historic Aerial Photograph Study 1996
PA/SI 2010-2015

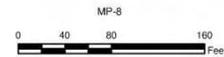
Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H4, in the southeastern portion of the installation, east of Ernie Pyle Street, west of Chisholm Road, south of 4th Street, and north of Huber Road.

Site Description: MP-8 was identified as an AOI because it was listed as a motor pool on the circa 1952 land use map (Anon., 1952). The EPA (1996) study shows a vehicle service and storage area at this location on aerial photographs from 1943, 1952, and 1957. This area is not shown in the 1947 aerial photograph. The 1952 land use map (Anon., 1952) identifies MP-8 in the southwestern portion of the AOI outlined in the EPA study (1996).

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, two subsurface soil samples were collected and one groundwater monitoring well was installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. Soil does not pose a risk at this AOI. The concentrations of chromium, manganese, cobalt, and thallium in groundwater cause excess risk at this AOI.



Current Use: Grass field

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and a SSI be conducted for groundwater for total and dissolved metals, including hexavalent and trivalent chromium speciation for this AOI. The SSI will further assess this AOI and determine if the AOI will move forward to the RI phase of CERCLA. If required, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.9 FGGM 96 (OU-46) – FORMER MP-9

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

PA/SI 2007

PA/SI 2010-2015

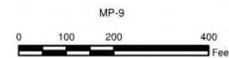
Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H4, in the eastern portion of the installation, east of Chamberlain Avenue, west of State Route 175, halfway between 6th and 4th Streets, and near present Building 375.

Site Description: The EPA (1996) historic aerial photograph study of the installation listed a vehicle service and storage area in this area on the 1943, 1947, 1952, 1957, 1963, 1970, and 1975 aerial photographs. This vehicle service and storage area was expanded after 1943; it covers more area on the 1947 aerial photograph and is larger yet on the 1952 aerial photograph, extending down to 4th Street. Stains appear in the 1952, 1957, 1963, and 1970 aerial photographs (EPA, 1996).

Previous Studies: Over the course of previous investigations at this AOI, four subsurface soil samples and two groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, iron, vanadium, and chromium elevate the risk numbers above the site-specific action levels. As part of the PA/SI, three surface soil samples and three subsurface soil samples were collected and four groundwater monitoring wells were installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. Soil does not pose a risk at this AOI. The concentrations of chromium, cobalt, naphthalene, and thallium in groundwater cause excess risk at this AOI.



Current Use: Administrative and a grass field

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and an SSI be conducted for groundwater for total and dissolved metals, including hexavalent and trivalent chromium speciation to calculate exposure point concentrations (EPCs) for this AOI. However, an RI/FS will be completed for this AOI. After the RI/FS, a PP and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.10 FGGM 96 (OU-46) – FORMER MP-10

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil and groundwater

Site Location: Grid H4, in the southeastern portion of the installation, north of 5th Street, south of Llewellyn Avenue, east of Wilson Street, and west of Ernie Pyle Street.

Site Description: MP-10 was identified as an AOI because it was listed as a motor pool on the circa 1952 land use map (Anon., 1952). This AOI was also identified in the EPA (1996) review of historic aerial photographs, which shows a vehicle service and storage area at this location on the 1938 aerial photograph. Part of this AOI is currently covered by the Kimbrough Army Community Hospital (identified as FGGM 37) and the boiler plant for the hospital (identified as SWMU 72). The 1952 land use map (Anon., 1952) locates MP-10 in a small portion of the middle of this AOI. The 1943 historic aerial photograph (EPA, 1996) outlines a larger area.

Previous Studies: Staining is observed in the 1943, 1947, and 1957 aerial photographs. By 1963, this former vehicle service and storage area had been converted into the Kimbrough Army Community Hospital. As part of the investigations of Buildings 2480 and 2482, soil and groundwater samples were collected from within the outline of MP-10. Previous samples are discussed under Buildings 2480 and 2482.

As part of the PA/SI, two surface soil samples were collected and two groundwater monitoring wells were installed and sampled. All samples were analyzed for VOCs, SVOCs, and metals. Soil does not pose a risk at this AOI. The concentrations of cobalt, manganese, and thallium in groundwater cause excess risk at this AOI.



Current Use: Kimbrough Army Community Hospital, parking lots, and grass areas

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and an SSI be conducted for groundwater for total and dissolved metals, including hexavalent and trivalent chromium speciation to calculate EPCs for this AOI. However, an RI/FS will be completed for this AOI. After the RI/FS, a PP and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.11 FGGM 96 (OU-46) – FORMER MP-11/WR-7

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H3, in the eastern portion of the installation, east of Ernie Pyle Street, west of State Route 175, north of Mapes Road, and south of 13th Street.

Site Description: MP-11/WR-7 was identified as an AOI because it was listed as a motor pool on the circa 1952 land use map (Anon., 1952). This AOI is also identified in the EPA (1996) study, which shows a vehicle service and storage area at this location in the 1947 and 1952 aerial photographs. Ground staining is visible at three locations, and standing liquid is noted at one location on the 1947 aerial photograph (EPA, 1996). The standing liquid was not discolored or stained. No staining is visible in the 1952 aerial photograph. A smaller area at this location is shown as a vehicle service and storage area in the 1963, 1970, and 1975 aerial photographs.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, four surface soil samples were collected and four groundwater monitoring wells were installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. Soil does not pose a risk at this AOI. The concentrations of chromium, benzo(a)pyrene, and cobalt in groundwater cause excess risk at this AOI.



MP-11 and WR-7
0 40 80 160
Feet

Current Use: Open field

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and an SSI be conducted for groundwater for total and dissolved metals, including hexavalent and trivalent chromium speciation for this AOI. The SSI will further assess this AOI and determine if the AOI will move forward to the RI phase of CERCLA. . After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.12 FGGM 96 (OU-46) – FORMER MP-12/WR-8

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H3, in the eastern portion of the installation, east of Chisholm Avenue, south of Reece Road, and west of State Route 175.

Site Description: MP-12/WR-8 was identified as an AOI because it was listed as a motor pool on the circa 1952 land use map (Anon., 1952). The AOI is also identified in the EPA (1996) study, which shows a vehicle service and storage area at this location on the 1957, 1963, 1970, and 1975 aerial photographs. Staining is visible in the southeast portion of this AOI in the 1957 and 1963 aerial photographs, and standing liquid is noted in the same area on the 1963 aerial photograph (EPA, 1996). The standing liquid was not discolored or stained. The write-up for the 1988 aerial photograph specifically states “Vehicle Service and Storage Area No Longer Present.”

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, two subsurface soil samples were collected and one groundwater monitoring well was installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH- GRO, and metals. Soil does not pose a risk at this AOI. The concentrations of chromium, benzo(a)pyrene, cobalt, manganese, and thallium in groundwater cause excess risk at this AOI.



MP-12 and WR-8
0 40 80 160
Feet

Current Use: Administrative and a grass area
Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and an SSI be conducted for groundwater for total and dissolved metals, including hexavalent and trivalent chromium speciation to calculate EPCs for this AOI. However, an RI/FS will be completed for this AOI. After the RI/FS, a PP and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.13 FGGM 96 (OU-46) – FORMER MP-13/WR-9

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H2, in the northeastern portion of the installation, north of Reece Road, east of Chisholm Avenue, and west of State Route 175.

Site Description: MP-13/WR-9 was identified as an AOI because it was listed as a motor pool on the circa 1952 land use map (Anon., 1952). This AOI is also identified in the EPA 1996 historic aerial photograph study of the installation, which shows a vehicle service and storage area at this location on the 1943, 1947, 1957, 1963, 1970, and 1988 aerial photographs. Staining is visible in the northwest portion of this AOI in the 1963 and 1970 aerial photographs (EPA, 1996).

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, one subsurface soil sample was collected and one groundwater monitoring well was installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. Soil does not pose a risk at this AOI. The concentrations of PAHs (dibenz(a,h)anthracene and benzo(a)pyrene) and cobalt in groundwater cause excess risk at this AOI.



MP-13 and WR-9
0 30 60 120 Feet

Current Use: Parking lot

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and a SSI be conducted for groundwater for PAHs and metals, including chromium speciation for this AOI. The SSI will further assess this AOI and determine if the AOI will move forward to the RI phase of CERCLA. . After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.14 FGGM 96 (OU-46) – FORMER MP-14

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H2, in the northeastern portion of the installation, east of State Route 175 and south of 20th Street.

Site Description: MP-14 was identified as an AOI because it was listed as a motor pool on the circa 1952 land use map (Anon., 1952). The AOI is also identified in the EPA (1996) historic aerial photograph study of the installation, which shows a vehicle service and storage area at this location on the 1943, 1947, 1952, 1957, 1963, 1970, and 1975 aerial photographs. Five sumps are shown in the southern and eastern portions of this area on the 1957 aerial photograph (EPA, 1996). The sumps, or the area around them, were not discolored or stained. A stain is visible in the southwest portion of this area in the 1963 aerial photograph, but not in subsequent aerial photographs.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, one subsurface soil sample was collected and analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals.



MP-14
0 45 90 180
Feet

Current Use: Parking lot and grass field

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and groundwater for this AOI.

2.1.17.15 FGGM 96 (OU-46) – FORMER MP-17

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996

PA/SI..... 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid G2, in the northeastern portion of the installation, north of Clark Road, east of MacArthur Road, and west of 21st Street.

Site Description: MP-17 was identified as an AOI because it was listed as a motor pool on the circa 1952 land use map (Anon., 1952). This AOI was also identified in the EPA (1996) historic aerial photograph study of the installation, which shows a vehicle service and storage area at this location on the 1943, 1947, 1957, 1963, and 1970 aerial photographs.

Previous Studies: No stains or stressed vegetation was observed at this AOI during the EPA (1996) review of historic aerial photographs of this AOI. There were no previous samples collected at this AOI.

As part of the PA/SI, six subsurface soil samples were collected and analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals.

The concentrations of chromium and iron in subsurface soil samples cause excess risk at this AOI.



Current Use: Ball field and grassy area

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for groundwater and a SSI be conducted for soils for chromium speciation for this AOI. The SSI will further assess this AOI and determine if the AOI will move forward to the RI phase of CERCLA. . After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.16 FGGM 96 (OU-46) – FORMER MP-18/WR-12

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

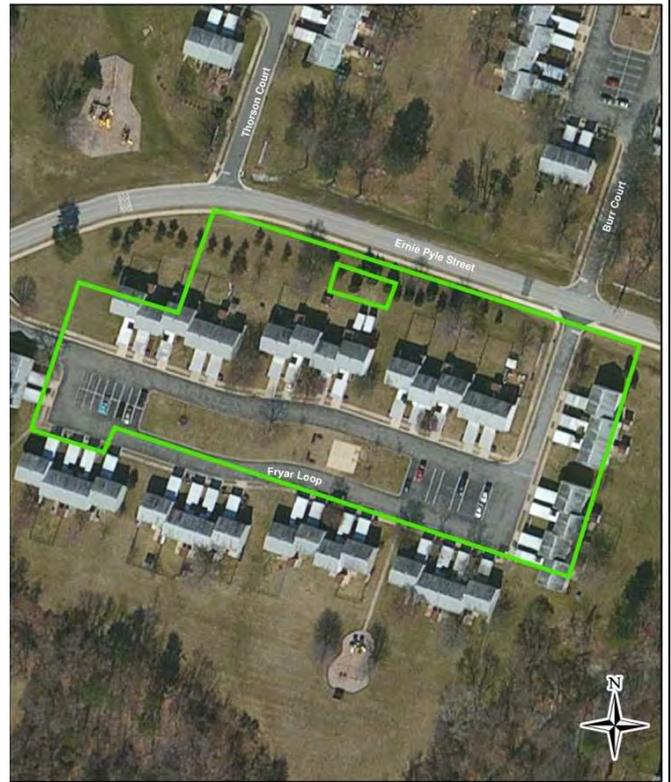
Media of Concern: Soil and groundwater

Site Location: Grid G2, in the northern portion of the installation, south of Ernie Pyle Street, at Fryar Loop.

Site Description: MP-18/WR-12 was identified as an AOI because it was listed as a motor pool on the circa 1952 land use map (Anon., 1952). The AOI is also identified in the EPA 1996 historic aerial photograph study of the installation, which shows a vehicle service and storage area at this location on the 1943, 1947, 1957, 1963, and 1970 aerial photographs.

Stressed vegetation is noted in the 1952 aerial photograph. Also, a runoff pattern was noted in the 1957 aerial photograph. The runoff pattern and stressed vegetation in the area were not present in subsequent historic aerial photographs.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, four subsurface soil samples were collected and four groundwater monitoring wells were installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. Soil does not pose a risk at this AOI. The concentrations of PAHs (benzo(a)pyrene and dibenz(a,h)anthracene), cobalt, and manganese in groundwater cause excess risk at this AOI.



Current Use: Administrative and parking areas
Current Status: The Final PA/SI Report has been approved.
Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and this AOI move forward to the RI phase of CERCLA for groundwater. The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.17 FGGM 96 (OU-46) – FORMER MP-19/WR-13

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid G2, in the northern portion of the installation, north of Clark Road, east of 27th Street, and west of Oliver Street.

Site Description: MP-19/WR-13 was identified as an AOI because it was listed as a motor pool on the circa 1952 land use map (Anon., 1952). The AOI was also identified in the EPA (1996) review, which shows a vehicle service and storage area at this location on the 1943, 1952, 1957, 1963, 1970, and 1975 aerial photographs.

Previous Studies: The EPA (1996) study identified a stain in the southwest portion of the AOI, stressed vegetation directly to the north, and a runoff pattern off the northwest corner of the vehicle service and storage area on the 1957 aerial photograph. Over the course of previous investigations at this AOI, six surface soil samples (plus one duplicate sample), six subsurface soil samples, and three groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, chromium elevates the risk numbers above the site-specific action levels.

As part of the PA/SI, eight subsurface soil samples were collected and eight groundwater monitoring wells were installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. Soil does not pose a risk at this AOI. The concentrations of chromium, cobalt, thallium, and iron in groundwater cause excess risk at this AOI.



Current Use: Buildings, parking areas, and a grass field

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and groundwater for this AOI.

2.1.17.18 FGGM 96 (OU-46) – FORMER WR-3

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996
 Historic Aerial Photograph Study..... 1996
 PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid F4, in the southern portion of the installation, north of Simonds Street and east of York Avenue.

Site Description: This WR was probably used for washing cars. Chemicals potentially used at this WR may have included soap and car wax. Neither this WR nor nearby Building 6507 were identified as SWMUs during the SWMU study (BCM, 1996), so there are no reports of hazardous chemicals being used or stored at the building or the WR. Access to WR-3 appears to be from York Avenue or along a path leading from Building 6507.

Previous Studies: The WR first appears on the 1943 aerial and is last seen on the 1977 aerial. By 1984, it is no longer visible. The EPA (1996) review of historic aerial photographs did not identify potential concerns at this area. No stained soils or stressed vegetation was identified on any aerial photographs.

As part of the PA/SI, four surface soil samples were collected and analyzed for VOCs, SVOCs, and metals.



Wash Rack 3
 0 25 50 100 Feet

Current Use: Undeveloped

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils for this AOI.

2.1.17.19 FGGM 96 (OU-46) – 6TH STREET AND CHISHOLM AVENUE

Regulatory Driver: CERCLA

Environmental Investigations:

Site Assessment 2010

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

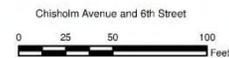
Site Location: Grid H4, in the southeastern portion of the installation, along Chisholm Avenue and 6th Street.

Site Description: 6th Street and Chisholm Avenue is an AOI because discolored soil with an unusual odor was uncovered during trenching for the installation of a communications duct bank.

Previous Studies: Over the course of previous investigations at this AOI, 11 subsurface soil samples (plus one duplicate) and three groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, 1,2,4-trimethylbenzene, iron, naphthalene, cobalt, and chromium elevate the risk numbers above the site-specific action levels.

The U.S. Army Public Health Command (2010) report recommended the installation of two additional temporary monitoring wells. One temporary monitoring well should be installed to the east of former temporary monitoring well 6TH-TWP-1. The second monitoring well should be installed to the northwest of former temporary monitoring well 6TH-TWP-1. The additional monitoring wells will be used to determine the horizontal extent of petroleum-affected groundwater.

As part of the PA/SI, eight subsurface soil samples were collected and analyzed for VOCs, TPH-DRO, and TPH-GRO and eight groundwater monitoring wells were installed and sampled for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. The concentrations of 1,2,4-trimethylbenzene and iron in soil and chromium, naphthalene, vinyl chloride, arsenic cobalt, iron, mercury, manganese, nickel, beryllium, and TPH in groundwater cause excess risk at this AOI.



Current Use: Vacant lot

Current Status: The Final PA/SI Report has been approved. In addition, the MDE Oil Control Program (OCP) is requesting further analysis for liquid petroleum hydrocarbon (LPH).

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for surface soils; a SSI be conducted for soils for VOCs and groundwater for total and dissolved metals, including hexavalent and trivalent chromium speciation that calculate EPCs. However, an RI/FS will be completed for this AOI. After the RI/FS, a PP and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.20 FGGM 96 (OU-46) – PHOTOGRAPHY LAB, BUILDING 546

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU	1996
Sampling Visit.....	1999
Delineation Reports.....	2000
PA/SI	2010-2015

Contaminants of Potential Concern: SVOCs and metals

Media of Concern: Soil and groundwater

Site Location: Grid H4, in the eastern portion of the installation, on 8th Street between Chamberlin and Chisholm Avenues.

Site Description: Building 546 was identified as a SWMU because of routine discharge of water from a silver recovery unit (BCM, 1996). The discharge point was the Fort Meade sanitary sewer system. There were no spills or reported releases identified during the SWMU study (BCM, 1996). Prior to 1985, the building was used as a visual information training center, and since 1985 it has been used as a full-service photographic laboratory, offices, and graphic arts department.

Previous Studies: Over the course of previous investigations at this AOI, 12 subsurface soil samples (plus one duplicate subsurface soil sample) and 12 groundwater samples (plus one duplicate groundwater sample) were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, copper, mercury, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, three groundwater monitoring wells were installed and sampled for SVOCs and metals. Soil does not pose a risk at this AOI. The concentrations of chromium, arsenic, thallium, mercury, copper, cobalt, and cadmium in groundwater cause excess risk at this AOI.



Building 546 - Photography Laboratory
0 25 50 100 Feet

Current Use: Unoccupied, scheduled for demolition

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and a SSI be conducted for groundwater for bis(2-ethylhexyl) phthalate, polyfluorinated chemicals, and total and dissolved metals, including hexavalent and trivalent chromium speciation for this AOI. However, an RI/FS will be completed for this AOI. After the RI/FS, a PP and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.21 FGGM 96 (OU-46) – MP, WR, AND OWS, BUILDING 940

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
Sampling Visits	1999
SI	2001
PA/SI	2010-2015

Contaminants of Potential Concern: Metals

Media of Concern: Soils and groundwater

Site Location: Grid G3/H3, in the eastern portion of the installation, in the northwest corner of the intersection of 18th and Ernie Pyle Streets.

Site Description: Former Building 940 (SWMU 146) was identified as a potential past SWMU in the 1996 SWMU study (BCM, 1996) because it was formerly used as an MP and it is not known exactly how waste from the MP was managed. The associated former WR (SWMU 13) and OWS (SWMU 12) were identified as potential SWMUs because of systematic discharge of wash water to the OWS from the WR (BCM, 1996). No spills or reported releases were identified during the SWMU study (BCM, 1996). Building 940 was vacant for a while and demolished in 1999. The OWS and WR were also removed in 1999.

Previous Studies: Over the course of previous investigations at this AOI, four surface soil samples (plus one duplicate surface soil sample), 14 subsurface soil samples (plus one duplicate subsurface soil sample), and 6 groundwater samples (plus two duplicate groundwater samples) were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, cobalt, iron, aluminum, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, two groundwater monitoring wells were installed and sampled for metals. Arsenic, beta-BHC, chromium and thallium were listed as COPCs.



Building 940 - Motor Pool, Wash Rack and Oil/Water Separator



Current Use: Parking lot

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and a SSI be conducted for groundwater for TPH-DRO, TPH-GRO, and chromium speciation for this AOI. The SSI will further assess this AOI and determine if the AOI will be recommended for NFA or move forward to the RI phase of CERCLA. . After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.22 FGGM 96 (OU-46) – ARMY RESERVES MP, VEHICLE MAINTENANCE, MOTOR REPAIR SHOP, OWS, AND WR, MP-15/WR-10, BUILDING 1007

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study.....	1996
SWMU Study.....	1996
Sampling Visits.....	1999
Draft Delineation Reports.....	2000
PA/SI.....	2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-GRO, and TPH-DRO

Media of Concern: Soil and groundwater

Site Location: Grid H2, in the northeastern portion of the installation, northwest of the intersection of 20th Street and State Route 175/Annapolis Road.

Site Description: This AOI comprises Building 1007 (SWMUs 14 and 15), an OWS (SWMU 16), a vehicle WR (SWMU 17), and a pump station (SWMU 18). Since its construction in 1941, Building 1007 has had a variety of uses, including equipment and vehicle storage, motor repair, and shipping of equipment. The shop used petroleum products, solvents, paints, and cleaning materials, and the U.S. Army Reserves stored military vehicles here.

The vehicle WR, OWS, and pump station were used to wash vehicles, collect the discharge water into the OWS, and then pump it into the sanitary sewer. The vehicle WR, OWS, and pump station were demolished and removed from service in 1999/2000.

Previous Studies: During previous sampling at this AOI, one surface soil sample (plus one duplicate surface soil sample), 17 subsurface soil samples (plus one duplicate subsurface soil sample), and 5 groundwater samples were collected and analyzed. Based on a risk analysis of the analytical results, arsenic, naphthalene, 1,2,4-trimethylbenzene, 1,1,2,2-tetrachloroethane, and chromium elevate the risk numbers above the site-specific action levels. Benzene and lead were detected above their MCLs.

As part of the PA/SI, two subsurface soil samples were collected and analyzed for VOCs and two groundwater monitoring wells were installed and



Building 1007 - Army Reserves Motor Pool
0 50 100 200 Feet

sampled for VOCs, SVOCs, total metals, TPH-DRO, and TPH- GRO. The concentrations of arsenic and chromium in soil and chromium, arsenic cobalt, and thallium in groundwater cause excess risk at this AOI.

Current Use: Parking lot; Building 1007 is being demolished.

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends a SSI be conducted for soils for metals including chromium speciation for this AOI and moving forward to the RI phase of CERCLA for groundwater for metals. The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.23 FGGM 96 (OU-46) – VEHICLE STORAGE AND MAINTENANCE, WR, AND OWS, BUILDING 2120C

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....	1996
Sampling Visits.....	1999
SI	2001
Project Summary Report.....	2003
PA/SI.....	2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soils and groundwater

Site Location: Grid H2, in the northeastern portion of the installation, in the southeast quadrant of the intersection of 21½ Street and Annapolis Road.

Site Description: Building 2120c Vehicle Storage and Maintenance was identified as Equipment Concentration Station 86 in the SWMU study (BCM, 1996). Building 2120c was identified as SWMU 25 because it had been used to maintain and repair motor vehicles (BCM, 1996). Hazardous chemicals and petroleum products used and stored in the building included motor and lubricating oil, sulfuric acid, antifreeze, used oil, degreasers, and batteries.

The OWS south of Building 2120c (SWMU 26), and the truck wash pit (SWMU 27) and associated OWS (SWMU 28) south of SWMU 26, were identified as SWMUs because of systematic discharge of wash water into the OWS from the building and truck wash pit (BCM, 1996).

Previous Studies: Over the course of previous investigations at this AOI, two surface soil samples (plus one duplicate surface soil sample), 22 subsurface soil samples (plus two duplicates), and 5 groundwater samples (plus two duplicates) were collected and submitted for chemical analysis. Based on a risk analysis of the analytical results, arsenic, cadmium, mercury, naphthalene, copper, beryllium, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, three groundwater monitoring wells were installed and sampled VOCs, SVOCs, TPH-DRO, TPH-GRO, and total metals. Soil does



not pose a risk at this AOI. The concentrations of arsenic, chromium, cobalt, manganese, 1,2,4-trimethylbenzene in groundwater cause excess risk at this AOI.

Current Use: Administrative

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and a SSI be conducted for groundwater for total and dissolved metals including chromium speciation for this AOI. The SSI will further assess this AOI and determine if the AOI will move forward to the RI phase of CERCLA. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.24 FGGM 96 (OU-46) – VEHICLE MAINTENANCE, MP-16/WR-11, FORMER BUILDING 2128

<p>Regulatory Driver: CERCLA</p> <p>Environmental Investigations:</p> <p>Historic Aerial Photograph Study..... 1996 SWMU Study..... 1996 Sampling Visits 1999 Initial Delineation..... 2000 Data Gap Investigation..... 2003 PA/SI 2010-2015</p> <p>Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO</p> <p>Media of Concern: Soil and groundwater</p> <p>Site Location: Grid H2, in the northeastern portion of the installation, approximately 600 feet east of the intersection of Annapolis Road and 21½ Street.</p> <p>Site Description: Building 2128 (SWMUs 35 and 36) was a former heavy equipment and generator maintenance shop constructed in 1941. It was used for maintenance of vehicles, generators, and forklifts. A parts cleaner, serviced by Safety Kleen, was used in the building. Wastes generated by routine oil changes and vehicle maintenance were taken to Building 2120c, located approximately 300 feet to the west, pending proper disposal.</p> <p>A circa 1952 land use map (Anon., 1952) shows former MP-16 located at this AOI and former WR-11 immediately south of this AOI.</p> <p>Previous Studies: During previous investigations at Building 2128, four surface soil samples (plus one duplicate), 22 subsurface soil samples (plus two duplicates), and 6 groundwater samples (plus two duplicates) were collected. Based on a risk analysis of the analytical results, arsenic, lead, mercury, copper, benzo(a)pyrene, and chromium elevate the risk numbers above the site-specific action levels.</p> <p>As part of the 2013 PA/SI, six surface soil samples were collected and analyzed for VOCs and SVOCs; six subsurface soil samples were collected and analyzed for VOCs, SVOCs, and metals; six groundwater monitoring wells were installed and sampled for VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO. Soil does not pose a risk at this AOI. The concentrations of PAHs</p>	 <p>(dibenz(a,h)anthracene, benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, and indeno(1,2,3- cd)pyrene), chromium, cobalt, manganese, and thallium in groundwater cause excess risk at this AOI.</p> <p>Current Use: Parking lot</p> <p>Current Status: The Final PA/SI Report has been approved.</p> <p>Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and a SSI be conducted for groundwater for SVOCs (PAHs) and metals including chromium speciation for this AOI. The SSI will further assess this AOI and determine if the AOI will move forward to the RI phase of CERCLA. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.</p>
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2.1.17.25 FGGM 96 (OU-46) – MAINTENANCE SHOP, WR, AND OWS, FORMER BUILDINGS 2227 AND 2234

<p>Regulatory Driver: CERCLA</p> <p>Environmental Investigations:</p> <p>Historic Aerial Photograph Study..... 1996 SWMU Study 1996 Sampling Visit 1999 Initial Delineation Report 2001 PA/SI 2010-2015</p> <p>Contaminants of Potential Concern: VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals</p> <p>Media of Concern: Soil and groundwater</p> <p>Site Location: Grid H5, in the southeastern portion of the installation, northeast of the intersection of 3rd Street and Pepper Road.</p> <p>Site Description: Constructed in 1941, Building 2227 (SWMU 147) was used as a vehicle repair shop until the mid-1980s. The WR (SWMU 44 and Building 2234) was used to wash vehicles and equipment; it discharged waste wash water to the OWS (SWMU 43), which discharged to the sanitary sewer system. By 1996, Building 2227 was no longer in use, and by 1999 the building, WR, and OWS had been demolished and removed. A former gas station was located southwest of Building 2234.</p> <p>Previous Studies: Over the course of previous investigations at this AOI, 27 subsurface soil samples (plus two duplicate samples) and 18 groundwater samples (plus one duplicate sample) were collected and submitted for laboratory analysis. Petroleum-free product was observed at locations GW18 and GW25. Based on a risk analysis of the analytical results, arsenic, chromium, naphthalene, benzene, toluene, xylenes (total), ethylbenzene, mercury, and toluene elevate the risk numbers above the site-specific action levels.</p> <p>As part of the PA/SI, four surface soil samples were collected and analyzed for VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO; four subsurface soil samples were collected and analyzed for VOCs, TPH-DRO, TPH-GRO, and metals; and three groundwater monitoring wells were installed and sampled VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO. Soil does not pose a risk at this AOI. The concentrations of</p>	 <p>chromium, arsenic, thallium, mercury, cobalt, and other metals in groundwater cause excess risk at this AOI.</p> <p>Current Use: Grass field</p> <p>Current Status: The Final PA/SI Report has been approved.</p> <p>Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for Building 2234. The Draft Final PA/SI Report recommends Building 2227 for NFA for soils and an SSI be conducted for groundwater, including one more round of sampling for total and dissolved metals including hexavalent and trivalent chromium speciation in order to calculate an EPC for the risk driving metals for this AOI. However, an RI/FS will be completed for this AOI. After the RI/FS, a PP and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.</p>
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2.1.17.26 FGGM 96 (OU-46) – BOILER PLANT, BUILDING 2482

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
Sampling Visit	2000
SI	2001
Data Gap Investigation	2002
PA/SI	2010-2015

Contaminants of Potential Concern: SVOCs, metals, PCBs, and dioxin

Media of Concern: Soil and groundwater

Site Location: Grid H4, in the southeastern portion of the installation, south of Kimbrough Army Community Hospital on 5th Street, approximately 500 feet west of the intersection with Ernie Pyle Street.

Site Description: Building 2482 was formerly used as a boiler plant to provide steam to Kimbrough Army Community Hospital. The plant contained three oil-fired boilers. A 400-gallon AST in the parking lot on the north side of the building stored used oil collected throughout the installation for recycling. Chemicals for boiler water treatment, including neutralizing solutions, phenolphthalein, hardness solution, iodine, sodium sulfate, phosphates, and caustic soda, were stored in the boiler room. Two 20,000-gallon fuel oil steel USTs were removed from the south side of the building in January 2001. An 8,000-gallon fiberglass-reinforced plastic fuel oil UST was abandoned in place on the northeast corner of the building.

Previous Studies: Over the course of previous investigations at this site, 10 surface soil samples, 14 subsurface soil samples, and 13 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, benzo(a)pyrene, benzo(a)anthracene, iron, naphthalene, cobalt, aluminum, and manganese elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, four surface soil samples were collected and analyzed for PCBs and dioxins; one subsurface soil sample was collected and analyzed for SVOCs; and one groundwater monitoring well was installed and sampled for metals and SVOCs.



Building 2482 - Used Oil Recycling Tank at Hospital Boiler Plant
0 30 60 120 Feet

The concentrations of benzo(a)pyrene and thallium in soil and chromium, arsenic, benzo(a)pyrene, naphthalene, and dibenzo(a,h)anthracene, cobalt, arsenic, naphthalene, iron, manganese, chromium, 2-methylnaphthalene, thallium, and vanadium in groundwater cause excess risk at this AOI.

Current Use: Administrative

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and this AOI move forward to the RI phase of CERCLA for groundwater and subsurface soils. The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.27 FGGM 96 (OU-46) – MEDICAL LAB, BUILDING 2490

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study..... 1996
 Sampling Visit..... 1999
 PA/SI..... 2010-2015

Contaminants of Potential Concern: Metals
 TPH-DRO, and TPH-GRO

Media of Concern: Soils and groundwater

Site Location: Grid H4, in the southeastern portion of the installation, approximately 500 feet south of the intersection of Wilson Street and Llewellyn Avenue.

Site Description: Building 2490 has been used as a medical laboratory since its construction in the late 1950s. Chemicals used in the lab include methanol, acid dichromate, 2-proponal, hexanes, and 2,2,4-trimethyl pentane. Chemicals used in the lab are kept in the refrigerated room or in flammable cabinets, as appropriate. The basement was used as a radioactive section of a clinical laboratory from 1960 to 1994. Chemicals used in the radioactive section included buffer solutions, alcohol, and WD-40. The radioactive materials were stored in a refrigerated room.

Previous Studies: Over the course of previous investigations at this site, 9 surface soil samples, 21 subsurface soil samples, and 9 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, mercury, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, one subsurface soil sample was collected and analyzed for SVOCs, metals TPH-DRO, TPH-GRO, dioxins, and furans; three groundwater monitoring wells were installed and sampled for VOCs, SVOCs, metals TPH-DRO, TPH-GRO. Soil does not pose a risk at this AOI. The concentrations of chromium, arsenic, manganese, iron, copper, and mercury in groundwater cause excess risk at this AOI.



Building 2490 - Forensic Toxicology and Drug Testing Lab
 0 25 50 100 Feet

Current Use: Administrative

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and an SSI be conducted for groundwater for total and dissolved metals, including hexavalent and trivalent chromium speciation that calculate EPCs for risk driving metal for this AOI. However, an RI/FS will be completed for this AOI. After the RI/FS, a PP and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.28 FGGM 96 (OU-46) – MAINTENANCE, BUILDING 2501

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....	1996
Sampling Visit.....	2000
RCRA and Data Gap Reports.....	2003
PA/SI.....	2010-2015

Contaminants of Potential Concern: TPH-DRO, TPH-GRO, VOCs, and metals

Media of Concern: Soils and groundwater

Site Location: Grid H4, in the eastern portion of the installation, northwest of the intersection of Chisholm and Llewellyn Avenues.

Site Description: Building 2501 was used as an equipment receiving and shipping facility in support of intelligence agencies. The facility had a foam pack machine that used a foam component and a hardener component (polymeric isocyanate). The polymeric isocyanate was stored in drums inside the building, and when the drums were empty they were disposed through the DRMO.

Previous Studies: Over the course of previous investigations at this site, 5 surface soil samples, 18 subsurface soil samples, and one groundwater sample were collected and submitted for analysis. A sheen was observed at location SB-1. Based on a risk analysis of the analytical results, arsenic elevates the risk numbers above the site-specific action levels.

As part of the PA/SI, one subsurface soil sample was collected and one groundwater monitoring well was installed and sampled. All samples were analyzed for VOCs, SVOCs, metals, TPH-DRO, TPH-GRO, and cyanide. Soil does not pose a risk at this AOI. The concentrations of chromium, arsenic, cobalt, mercury, beryllium, nickel, thallium, and aluminum in groundwater cause excess risk at this AOI.



Building 2501 - Shipping and Receiving
0 25 50 100 Feet

Current Use: Administrative

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and this AOI move forward to the RI phase of CERCLA for groundwater. The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.29 FGGM 96 (OU-46) – DISPATCH, STORAGE, AND PARKING AREA FOR EMERGENCY MEDICAL UNITS AND WR NEAR BUILDING 2630

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
Sampling Visits	1999
SI	2001
PA/SI	2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, TPH-GRO, herbicides, and pesticides

Media of Concern: Soil and groundwater

Site Location: Grid H4, in the eastern portion of the installation, west of the intersection of Ernie Pyle and 10th Streets, and north of Building 2630.

Site Description: The SWMU 78 WR was used for washing military vehicles and was constructed of a bermed concrete platform with a catch basin that drained to the OWS (SWMU 77). Formerly two WRs, identified as SWMU 79, were in a former building north of Building 2630. They were removed sometime prior to 1999.

Previous Studies: Over the course of previous investigations at this site, 17 direct-push borings were completed; four surface soil, 17 subsurface soil, and two groundwater samples were collected and submitted for analysis. Based on a risk analysis of the analytical results, methylchlorophenoxypropionic acid (MCP) and arsenic elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, two surface soil samples were collected and analyzed for herbicides, and two groundwater monitoring wells were installed and sampled for VOCs, SVOCs, TPH-DRO, TPH-GRO, metals, herbicides, and pesticides. Soil does not pose a risk at this AOI. The concentrations of chromium, cobalt, and thallium in groundwater cause excess risk at this AOI.



Building 2630 - Dispatch, Storage, and Parking Area for Emergency Medical Units Wash Rack

0 25 50 100 Feet

Current Use: Administrative and vacant lot

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and an SSI be conducted for groundwater for total and dissolved metals, including hexavalent and trivalent chromium speciation for this AOI. The SSI will further assess this AOI and determine if the AOI will move forward to the RI phase of CERCLA. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.30 FGGM 96 (OU-46) – OUTDOOR RECREATION EQUIPMENT RENTALS AND WR, BUILDING 2724

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
RFA 3 rd Phase	1999
Sampling Visits	1999 and 2001
SI	2001
PA/SI	2010-2015

Contaminants of Potential Concern: VOCs, metals, TPH-DRO, TPH-GRO, herbicides, and pesticides

Media of Concern: Soil and groundwater

Site Location: Grid H3, in the eastern portion of the installation, 700 feet north of the intersection of Mapes Road and Ernie Pyle Street.

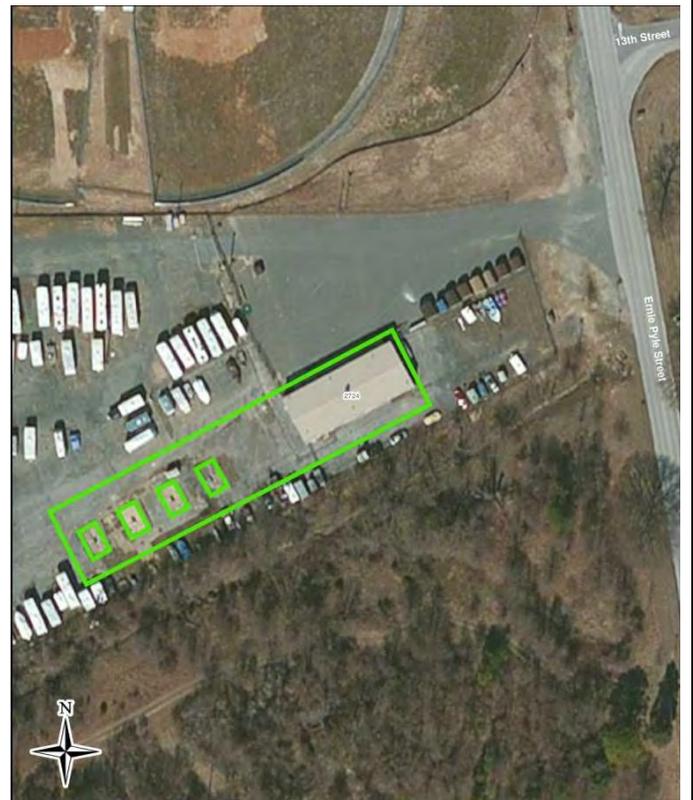
Site Description: Building 2724 was constructed in the 1950s and used by the Directorate of Personnel & Community Activities for outdoor recreation equipment rental.

Four WRs and two associated OWS were located approximately 100 feet to the west- southwest of Building 2724. The WRs consisted of concrete basins that discharged into the two OWS. The OWS discharged into the hazardous waste storage shed in the parking lot. The WRs and OWS were removed and paved over with concrete in 1999/2000.

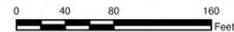
Previously, larger quantities of hazardous chemicals and petroleum products were used and stored within and outside the building, including motor and lubricating oil, antifreeze, used oil, degreasers, and batteries.

Previous Studies: Over the course of previous investigations at this site, four surface soil, 18 subsurface soil, and 19 groundwater samples were collected and submitted for analysis. Based on a risk analysis of the analytical results, 2-methyl-4-chlorophenoxyacetic acid (MCPA), iron, aluminum, mercury, cobalt, manganese, arsenic, copper, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, four subsurface soil samples were collected and analyzed for VOCs and four groundwater monitoring wells were installed and



Building 2724 - Directorate of Personnel and Community Activities Outdoor Recreation Equipment Rentals, Wash Rack



sampled for VOCs, herbicides, pesticides, TPH-DRO, and metals. Soil does not pose a risk at this AOI. The concentrations of chromium, arsenic, TCE, PCE, manganese, MCPA, and cobalt in groundwater cause excess risk at this AOI.

Current Use: Outdoor recreation equipment storage

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and this AOI move forward to the RI phase of CERCLA for groundwater. The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.31 FGGM 96 (OU-46) – WRs, RECREATIONAL EQUIPMENT STORAGE, OWS, AND RV STORAGE, AND MAINTENANCE SHOP, BUILDING 2728

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study..... 1996
 RFA 3rd Phase 1999
 SI..... 2001
 PA/SI..... 2010-2015

Contaminants of Potential Concern: VOCs, metals, herbicides, and pesticides

Media of Concern: Soil and groundwater

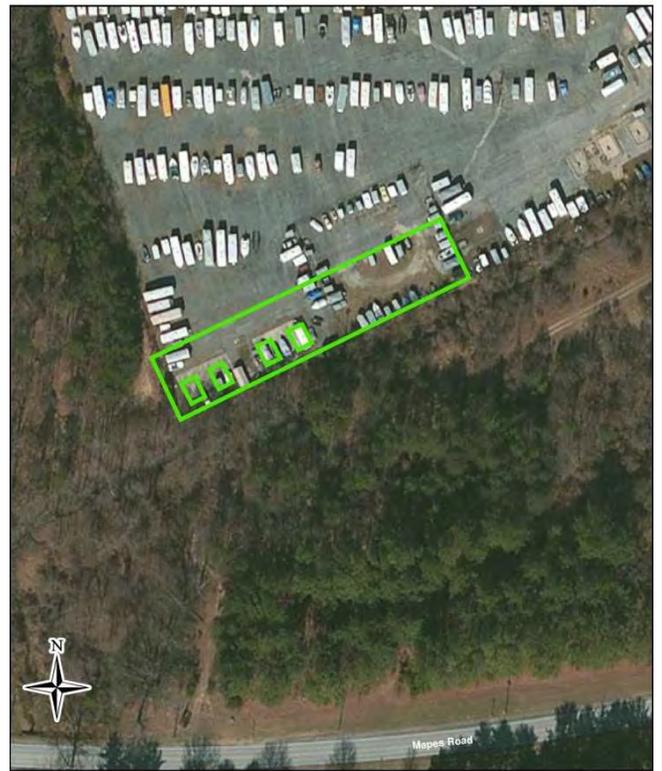
Site Location: Grid H3, in the eastern portion of the installation, 700 feet north of the intersection of Mapes Road and Ernie Pyle Street. The WRs associated with the building are located approximately 800 feet west of Ernie Pyle Street and 500 feet north of Mapes Road.

Site Description: Building 2728 (SWMU 148) was built in the 1950s and was formerly used as a military vehicle and equipment maintenance facility. It stored relatively small quantities of hazardous chemicals (motor and lubricating oil, antifreeze, used oil, degreasers, and batteries).

Four WRs (SWMUs 89 and 92) and two OWS (SWMUs 87 and 88) were removed and paved over with concrete in 1999 and 2000.

Previous Studies: Over the course of previous investigations at this site, 20 direct-push borings were completed; four surface soil, 20 subsurface soil, and 10 groundwater samples were collected and submitted for analysis. Based on a risk analysis of the analytical results, MCPA, MCPP, chloroform, and bromodichloromethane elevate the risk numbers above the site-specific action levels.

As part of the 2013 PA/SI, two surface soil samples were collected and analyzed for herbicides and two groundwater monitoring wells were installed and sampled for VOCs and metals. Soil does not pose a risk at this AOI. The concentrations of chloroform, chromium, manganese, and thallium in groundwater cause excess risk at this AOI.



Building 2728 - Out of Service Wash Racks, Recreational Equipment and Storage
 0 50 100 200 Feet

Current Use: Storage of outdoor recreational equipment/vehicles

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for subsurface soils; a SSI be conducted for surface soils for herbicides to obtain more data points to calculate EPC; and this AOI move forward to the RI phase of CERCLA for groundwater. However, since an RI is recommended for groundwater, the surface soil investigation should be included in the RI for this AOI. The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.32 FGGM 96 (OU-46) – LAB AND BARRACKS, FORMER BUILDINGS 2810, 2811, AND 2832

Regulatory Driver: CERCLA

Environmental Investigations:
 Historic Aerial Photograph Study 1996
 SWMU Study 1996
 PA/SI 2010-2015

Contaminants of Potential Concern: Metals

Media of Concern: Soil and groundwater

Site Location: Grid H3, in the eastern portion of the installation, northeast of the intersection of Ernie Pyle and 14th Streets.

Site Description: Former Building 2810 – Lab and 1941 Dayroom (Non-SWMU 6) was constructed in the early 1940s and has only been used for administrative purposes. A library moved here in the 1990s.

Former Building 2811 – Lab and 1941 Barracks (Non-SWMU 7) was constructed in the early 1940s. It was used as a barracks in the 1970s. The Army Dental Research Detachment moved into the building in the 1980s; the first floor was used as a dental research laboratory, and the second floor was administrative. All chemicals were used entirely, and the building did not generate waste.

Former Building 2832 – Administrative and 1941 Unknown (Non-SWMU 8) has been used solely for administration since its construction in the early 1940s and did not generate waste. The Army Dental Research Detachment moved into this building in the 1980s and used it for administrative purposes.

All of the buildings were demolished in 1999 or 2000.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, one subsurface soil sample was collected and one groundwater monitoring well was installed and sampled. All samples were analyzed for metals. Soil does not pose a risk at this AOI. The concentrations of cobalt and manganese in groundwater cause excess risk at this AOI.



FGGM 96 - Buildings 2810, 2811, 2832 - Former Dental Research Buildings
 0 25 50 100 Feet

Current Use: Grassy field

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and an SSI be conducted for groundwater for total and dissolved metals, including hexavalent and trivalent chromium speciation for this AOI. However, an RI/FS will be completed for this AOI. After the RI/FS, a PP and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.33 FGGM 96 (OU-46) – SCREEN REPAIR AND INDUSTRIAL SHOP, BUILDING 3000

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
Sampling Visit	2000
Data Gap Investigation	2002
PA/SI	2010-2015

Contaminants of Potential Concern: VOCs

Media of Concern: Soils and groundwater

Site Location: Grid G2, in the northeastern portion of the installation, approximately 300 feet east of the intersection of 21st and Ernie Pyle Streets.

Site Description: Building 3000 was identified as a SWMU because waste is systematically discarded and contained at the facility (BCM, 1996). Freon recovery and disposal also occurs. In addition, materials stored in the parking lot may have been spilled, though no spills or reported releases were identified during the SWMU study (BCM, 1996). The building is surrounded by pavement. At the time of the sampling visits, this AOI was handling chemicals properly, used secondary containment, and everything was on paved surfaces. No spills or leaks were reported, and no signs of spills or leaks were noted during site visits.

Previous Studies: Over the course of previous studies at this AOI, 9 surface soil samples (plus one duplicate surface soil sample) and 11 subsurface soil samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.

As part of the PA/SI, one groundwater monitoring well was installed and sampled for VOCs.



Building 3000 - Maintenance Shop
0 25 50 100 Feet

Current Use: Community

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Draft Final PA/SI Report recommends NFA for groundwater and soils for this AOI.

2.1.17.34 FGGM 96 (OU-46) – 1941 COLD STORAGE, BUILDING 4272

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996

SWMU Study 1996

PA/SI 2010-2015

Contaminants of Potential Concern: None identified

Media of Concern: None identified

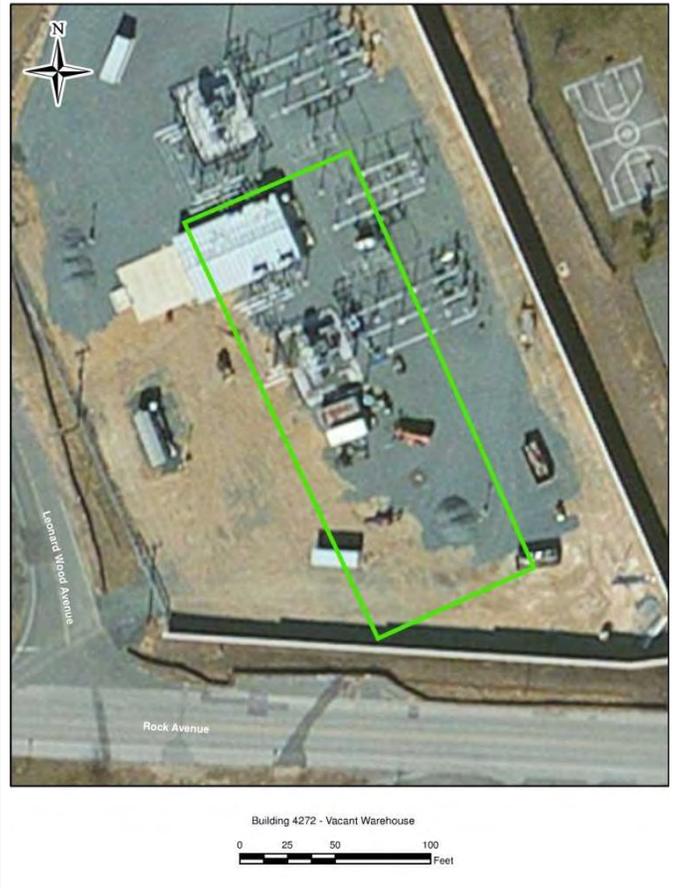
Site Location: Grid G5, in the southern portion of the installation, northeast of the intersection of Rock Avenue and Leonard Wood Avenue.

Site Description: Building 4272 was used as a cold storage facility for the commissary from the early 1940s until 1994, and was a vacant warehouse at the time of the 1996 SWMU study. The building contained a Freon unit that was stored in a machine room. Freon 22 was used from 1981 to 1996; Freon 12 was used prior to 1981. All of the Freon has been drained from the refrigeration units. The 1996 SWMU study reported that any leaks of Freon or oils would have been contained within the building.

Building 4272 was not identified as a SWMU in the 1996 SWMU study. The SWMU study recommended NFA for this AOI.

Previous Studies: There have been no soil samples collected at this AOI over the course of previous studies.

As part of the PA/SI, one groundwater monitoring well was installed and sampled for Freon.



Current Use: Electrical substation

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Draft Final PA/SI Report recommends NFA for groundwater this AOI.

2.1.17.35 FGGM 96 (OU-46) – FORMER HOSPITAL, BUILDING 4411

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....	1996
Sampling Visit	1999
Data Gap Investigation.....	2002
PA/SI.....	2010-2015

Contaminants of Potential Concern: SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soils and groundwater

Site Location: Grid G4, in the southeastern portion of the installation, approximately 100 feet southwest of the intersection of McKay Street and Llewellyn Avenue.

Site Description: Building 4411 was formerly used as a hospital from 1926 to 1974. A 1,000-gallon heating oil UST is located beneath the porch on the southern side of the building. The exactly how waste from the hospital was managed is unknown.

Previous Studies: Over the course of previous investigations at this AOI, 16 direct-push borings were advanced around Building 4411; 5 surface soil, 13 subsurface soil, and 10 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, mercury, and chromium elevate the risk numbers above the site-specific action levels.

During the PA/SI, four groundwater monitoring wells were installed and sampled for SVOCs, TPH-DRO, TPH-GRO, and total metals. Soil does not pose a risk at this AOI. The concentrations of chromium, arsenic, cobalt, and thallium in groundwater cause excess risk at this AOI.



Building 4411
0 25 50 100 Feet

Current Use: Administrative

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and an SSI be conducted for groundwater for total and dissolved metals, including hexavalent and trivalent chromium speciation for this AOI. However, an RI/FS will be completed for this AOI. After the RI/FS, a PP and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.36 FGGM 96 (OU-46) – MOTOR REPAIR AND GARAGE, BUILDING 4587

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
Historic Aerial Photograph Study	1996
RFA 3 rd Phase	1999
SI	2001
PA/SI	2010-2015

Contaminants of Potential Concern: VOCs, metals, herbicides, and PCBs

Media of Concern: Groundwater

Site Location: Grid G4, in the southern portion of the installation approximately 150 feet southeast of the intersection of Leonard Wood Avenue and Simonds Street.

Site Description: Building 4587 was used as a personal vehicle repair shop and was formerly used as a MP. An oil crusher and parts washer are located in Building 4587 for vehicle and equipment maintenance activities. The crushed filters were placed in 55-gallon drums, and used oil was stored a double-walled 800-gallon AST located outside of the east wall of the building. When the 55-gallon drums became full, they were sent DRMO for disposal. The used oil and cleaner from the parts washer were also managed through the DRMO. An OWS was located in the southern end of Building 4587. The OWS accepted runoff from the floor drains within the building. Five former USTs were located at Building 4587. All five USTs were 550-gallon tanks that stored No. 2 fuel oil for heating the building.

Previous Studies: Over the course of previous investigations at this AOI, 6 surface soil samples, 7 subsurface soil samples, and 11 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, MCPA, MCPP, iron, and chromium elevate the risk numbers above the site-specific action levels.

During the PA/SI, three groundwater monitoring wells were installed and sampled for VOCs, total



Building 4587 - Equipment Storage and
AFFES Personnel Vehicle Repair Shop and Wash Rack
0 25 50 100
Feet

and dissolved metals, herbicides, and PCBs. Soil does not pose a risk at this AOI. The concentrations of benzene in groundwater cause excess risk at this AOI.

Current Use: Vehicle Maintenance / Leased to Firestone

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for groundwater and soils for this AOI. The Final PA/SI also recommended that the MDE-OCP oversee the petroleum constituents at this AOI. However, a March 2011 memo from MDE-OCP to MDE-Hazardous Waste Program-Federal Facilities Division, Building 4587 was listed as a “site where no further action is recommended by the OCP”.

2.1.17.37 FGGM 96 (OU-46) – SERVICE STATION AND PAST VEHICLE REPAIR SHOP, BUILDING 4680

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....	1996
Historic Aerial Photograph Study.....	1996
RFA 3 rd Phase.....	1999
SI.....	2001
PA/SI.....	2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, and PCBs

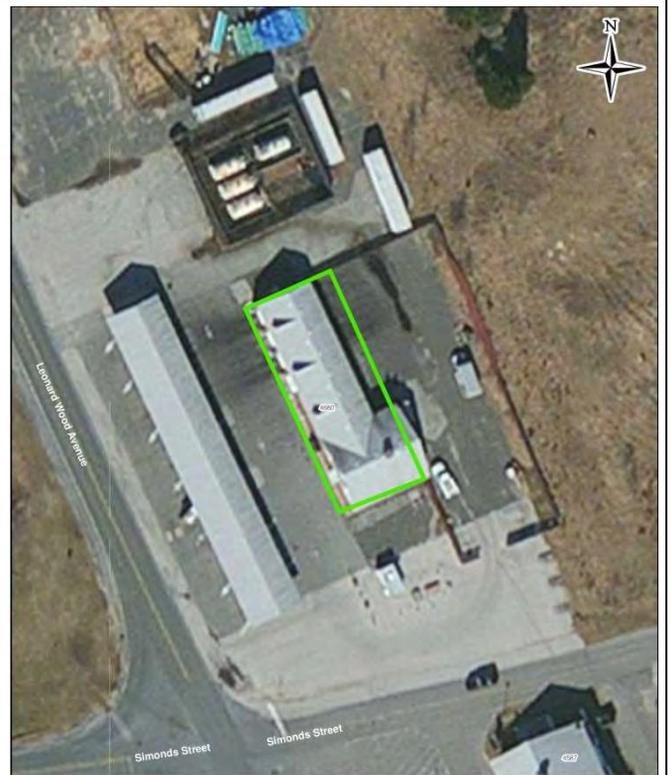
Media of Concern: Soil and groundwater

Site Location: Grid G4, in the southern portion of the installation, approximately 150 feet northeast of the intersection of Leonard Wood Avenue and Simonds Street.

Site Description: Building 4680 was used as an auto-detailing shop and gas station, with paved parking, gas pump islands, and an AST enclosure. The AST enclosure was a membrane-lined concrete structure that provided fuel to dispenser islands throughout the AOI. At the time of the SWMU study, the AOI contained a 500-gallon used oil tank, an OWS, and a non-operable oil filter crusher. There were 12 active gasoline pumps associated with the gasoline service station. Since 1985, the USTs were removed and replaced with ASTs. Personnel at Building 4680 at the time of the SWMU study thought that several USTs that were removed had been leaking fuel oil.

Previous Studies: Over the course of previous investigations at this AOI, four surface soil samples, 23 subsurface soil samples, and 25 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, chromium, naphthalene, arsenic, acrolein, benzene, and 1,2,4-trimethylbenzene elevate the risk numbers above the site-specific action levels.

During the PA/SI, five groundwater monitoring wells were installed and sampled for VOCs, SVOCs, metals, and PCBs. Soil does not pose a risk at this AOI. The concentrations of benzene,



Building 4680 - Gas Station and Detailing Shop
0 25 50 100 Feet

naphthalene, ethylbenzene, arsenic, 1,2,4-trimethylbenzene, xylenes, toluene, and some metals in groundwater cause excess risk at this AOI.

Current Use: Automotive detailing shop

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and this AOI move forward to the RI phase of CERCLA for groundwater. The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.38 FGGM 96 (OU-46) – WR AND OWS SOUTHEAST OF FORMER BUILDING 8480

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....	1996
RFA 3 rd Phase.....	1999
SI.....	2001
Data Gap Investigation.....	2002
PA/SI.....	2010-2015

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F5, in the southwestern portion of the installation, north of Dutt Road.

Site Description: This AOI included a former WR (SWMU 111) that discharged wash water to an OWS (SWMU 110), which in turn discharged to a sanitary sewer line south of the WR. The discharge water was treated at a wastewater treatment plant. This former WR and OWS was located southeast of former Building 8480.

Previous Studies: Over the course of previous investigations at this AOI, 14 surface soil samples and 20 subsurface soil samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, MCPP elevates the risk numbers above the site-specific action levels.

The PA/SI included collecting one subsurface soil sample and analyzing it for herbicides.



Building 8480 - Military Vehicle and Equipment Storage

0 25 50 100 Feet

Current Use: Parking lot and grass areas

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for this AOI.

2.1.17.39 FGGM 96 (OU-46) – VEHICLE MAINTENANCE AND FORMER WR-1, BUILDING 8485

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study..... 1996
 Historic Aerial Photograph Study..... 1996
 RFA 3rd Phase..... 1999
 Sis..... 2001 and 2002
 PA/SI..... 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, and PCBs

Media of Concern: Soil and groundwater

Site Location: Grid F5, in the southwest portion of the installation in the southeast quadrant of the intersection of O'Brien Road and Simonds Street.

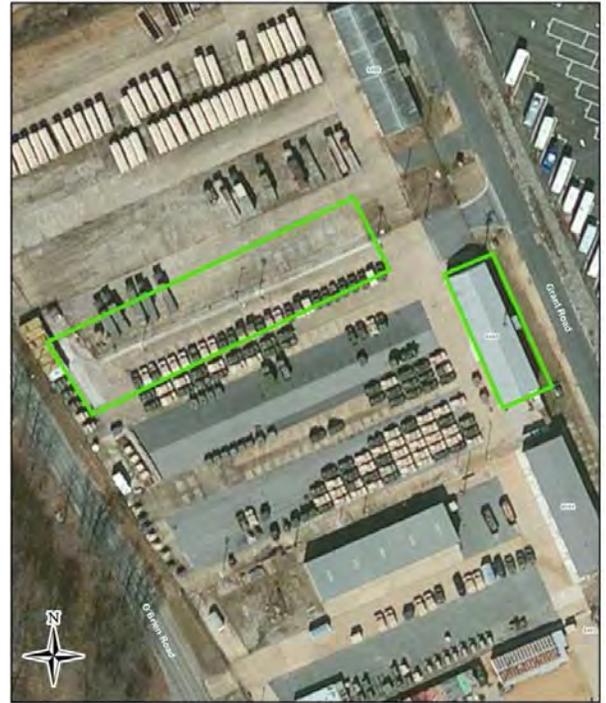
Site Description: Building 8485 (SWMUs 115 and 116) was a MP and maintenance shop. A former WR (SWMU 116A) located west of Building 8485 was discontinued in 1994 and paved with concrete in 1999. The WR discharged wash water to the sanitary sewer, where it was treated at a sewage treatment plant.

A used oil AST was located on the north side of the building. A 2,000-gallon UST used to store No. 2 heating oil was formerly located on the eastern side of the building. It was removed and clean closed in 1989, and replaced by another 2,000-gallon heating oil UST that was removed and clean closed in 1999.

Previous Studies: A dark stained liquid (1970), vertical tanks (1943-1947), and possible dump/waste storage (1943) were identified in the EPA (1996) study.

Over the course of previous investigations at this AOI, 5 surface soil samples, 35 subsurface soil samples (plus three duplicates), and 23 groundwater samples (plus five duplicates) were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, chromium, benzene, arsenic, naphthalene, 1,2,4-trimethylbenzene, ethylbenzene, iron, and toluene elevate the risk numbers above the site- specific action levels.

During the PA/SI, three surface soil samples and two subsurface soil samples were collected and 13 additional groundwater monitoring wells were installed and sampled. All samples were analyzed



Building 8485 - Military Vehicle and Equipment Storage
 0 40 80 160 Feet

for VOCs, SVOCs, metals, PCBs (only four groundwater samples), and TPH-DRO and GRO (one subsurface soil sample). The concentrations of chromium, cobalt, and 1,2,4-trimethylbenzene in soil and naphthalene, arsenic, benzene, chromium, ethylbenzene, benzo(a)pyrene, iron, 2-methylnaphthalene, 1,2,4-trimethylbenzene, dibenzofuran, manganese, thallium, 1,3,5-trimethylbenzene, xylenes, and cobalt in groundwater cause excess risk at this AOI.

Current Use: Parking lot

Current Status: The Final PA/SI Report has been approved. The MDE OCP is requesting further analysis for LPH

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for subsurface soils and this AOI move forward to the RI phase of CERCLA for groundwater and surface soils. The RI will either recommend NFA based on a risk assessment, require further study under the MDE-OCP, or recommend further action to comply with regulatory guidelines for remediation.

2.1.17.40 FGGM 96 (OU-46) – MAINTENANCE SHOP, BUILDING 8486

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study	1996
SWMU Study	1996
RFA 3 rd Phase	1999
SI	2001
PA/SI	2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, PCBs, TPH-DRO, and TPH-GRO

Media of Concern: Soils and groundwater

Site Location: Grid F5, in the southwest portion of the installation southeast of the intersection of Grant Road and Simonds Street.

Site Description: Building 8486 (SWMUs 117 and 118) was constructed in 1950 and used as a military vehicle and equipment maintenance and repair shop.

Asphalt and concrete parking lots that contain several sheds used to house paints, oils, antifreeze, and used oil are located west of Building 8486.

An 800-gallon used oil AST is present on the east side of Building 8486.

Two USTs (one 2,000-gallon and one 2,500-gallon) once existed between the building and Grant Road. The tanks were used to store heating oil for the building’s furnace. The 2,000-gallon tank was installed in 1979 and removed in 1994. The 2,500-gallon tank was installed in 1995 and removed in 1999.

Small quantities of hazardous chemicals have historically been used and stored in storage cabinets at designated areas at this AOI.

Previous Studies: Over the course of previous investigations at this AOI, 19 subsurface soil samples and 19 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, 1,2,4-trimethylbenzene, arsenic, naphthalene, and chromium elevate the risk numbers above the site-specific action levels.

During the PA/SI, five groundwater monitoring wells were installed and sampled for VOCs, total



Building 8486 - Motor Pool
0 30 60 120 Feet

and dissolved metals, PCBs, TPH-DRO, and TPH-GRO. Soil does not pose a risk at this AOI. The concentrations of naphthalene, arsenic, 2-methylnaphthalene, iron, manganese, dibenzofuran, 1,1-biphenyl, cobalt in groundwater cause excess risk at this AOI.

Current Use: Maintenance

Current Status: The Final PA/SI Report has been approved. The MDE OCP is requesting further analysis for LPH.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and this AOI move forward to the RI phase of CERCLA for groundwater. The RI will either recommend NFA based on a risk assessment, require further study under the MDE-OCP, or recommend further action to comply with regulatory guidelines for remediation.

2.1.17.41 FGGM 96 (OU-46) – FORMER MP AND WR, BUILDINGS 8549, 8550, AND 8551

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
Historic Aerial Photograph Study.....	1996
RFA 3 rd Phase.....	1999
SI	2001
Project Summary Report.....	2003
PA/SI	2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, TPH-GRO, cyanide, and PCBs

Media of Concern: Soil and groundwater

Site Location: Grid F4, in the southwest portion of the installation, near the intersection of O'Brien Road and Simonds Street

Site Description: Building 8549 was constructed in the mid-1950s, served as a MP (SWMU 122) until the mid-1990s, and as a biomedical maintenance area (SWMU 121) from 1994 to the late 1990s. Since then, it has been used as a practice hall and instrument storage for military musicians.

Building 8550 was constructed in the mid-1950s and used as a motor pool (SWMU 126) until December of 1993, when the 85th General Hospital Maintenance (SWMU 125) moved in.

Building 8551 was used as a vehicle maintenance shop (SWMU 149). The WR (SWMU 128) and OWS (SWMU

127) were identified as SWMUs because of systematic discharge of wash water to the OWS (BCM, 1996).

Previous Studies: Over the course of previous investigations at this AOI, three surface soil samples, 36 subsurface samples (plus one duplicate sample), and 29 groundwater samples (plus one duplicate sample) were collected and analyzed. Based on a risk analysis of the analytical results, benzo(a)pyrene, cadmium, lead, arsenic, and chromium elevate the risk numbers above the site-specific action levels.

During the PA/SI, three surface soil samples were collected and analyzed for VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO. One subsurface soil sample was collected and analyzed for SVOCs.



Buildings 8549 - 8550 - 8551
0 40 80 160 Feet

Six groundwater monitoring wells were installed and groundwater samples were analyzed for VOCs, SVOCs, metals, TPH-DRO, TPH-GRO, cyanide, and PCBs. Soil does not pose a risk at this AOI. The concentrations of arsenic, chloroform, chromium, cobalt, TPH-DRO, and TPH-GRO in groundwater cause excess risk at this AOI.

Current Use: Practice hall and instrument storage

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for surface soils and this AOI move forward to the RI phase of CERCLA for groundwater and subsurface soils. The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.42 FGGM 96 (OU-46) – WASTEWATER TREATMENT PLANT, BUILDING 9581

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996
 Historic Aerial Photograph Study 1996
 RFA 3rd Phase 1999
 PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, metals, and pH

Media of Concern: Soil and groundwater

Site Location: Grids E4 and E5, in the southwest portion of the installation, approximately 600 feet southwest of the intersection of State Routes 32 and 198. SWMU 138 (Building 9581 – Wastewater Treatment Facility) and FGGM 19 (the Advanced Wastewater Treatment Facility) are collocated, and all investigation of this geographic area is being conducted under SWMU 138. AEDB-R FGGM 19 has been administratively closed, and all future work associated with FGGM 19 will be handled under SWMU 138.

Site Description: Building 9581 is a sewage treatment facility that was constructed in the late 1970s or early 1980s. Building 9581 contains a 4,000-gallon hydrochloric acid AST, a lime silo, and multiple open-top, below-ground wastewater treatment tanks. Building 9581 had two USTs that are now abandoned; a 4,000-gallon steel UST that contained heating abandoned in November 2000 and a 10,000-gallon steel UST that contained diesel fuel abandoned in 1990,

Previous Studies: Over the course of previous investigations at this AOI, one surface soil sample, 22 subsurface soil samples, and 9 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic and chromium elevate the risk numbers above the site-specific action levels.

During the PA/SI, two groundwater monitoring wells were installed and sampled for VOCs, metals, and pH. Soil does not pose a risk at this AOI. The concentrations of arsenic, cobalt, chromium, manganese, and iron in groundwater cause excess risk at this AOI.



Building 9581 - Wastewater Treatment Plant
 0 60 120 240 Feet

Current Use: Sewage treatment facility

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and this AOI move forward to the RI phase of CERCLA for groundwater. The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

This AOI should also be investigated by the operator of the wastewater treatment plant under the direction of the MDE Water Management Administration Compliance Division

2.1.17.43 FGGM 96 (OU-46) – POSSIBLE VEHICLE SERVICE AREA A – 1943

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H4, in the eastern portion of the installation, east of Ernie Pyle Street, west of Chisholm Avenue, south of 9th Street, and north of 8th Street.

Site Description: A possible vehicle service and staging area was identified at this location in the 1943, 1947, and 1952 aerial photographs (EPA, 1996). Staining was also noted in the 1943 aerial photograph. The circa 1952 land use map identifies 19 MPs on the installation, but it did not identify a MP at the location of Possible Vehicle Service Area A – 1943. According to the 1952 land use map, Buildings 2511 and 2517 were located in the northern portion of this AOI, and Buildings 2504 and 2509 were located in the southern portion of this AOI. There is ample evidence to suggest that this AOI was not used to service vehicles.

Previous Studies: There were no previous samples collected at this AOI. The PA/SI included soil and groundwater sampling in the areas of past staining. Three subsurface soil samples were collected and one groundwater monitoring well was installed and sampled. All samples were analyzed for VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO. Soil does not pose a risk at this AOI. The concentrations of chromium in groundwater cause excess risk at this AOI.



Possible Vehicle Service Area A -- 1943
0 35 70 140 Feet

Current Use: Grass field and parking lot

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and groundwater for this AOI.

2.1.17.44 FGGM 96 (OU-46) – POSSIBLE VEHICLE SERVICE AREA B – 1943

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study.....1996

PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H3, in the eastern portion of the installation, north of Mapes Road and west of Ernie Pyle Street.

Site Description: A possible vehicle service and staging area was identified at this location in a 1943 aerial photograph (EPA, 1996). The EPA (1996) study did not identify stained soils or stressed vegetation in this area in any of the historic aerial photographs. According to the 1952 land use map, Building 2722 was located on the eastern edge of this AOI, and Building 2720 was located in the southern portion of the AOI. By 1988, most of this AOI is tree covered. There is little evidence to suggest that vehicles were serviced at this AOI; it was probably used as a parking lot.

Previous Studies: No previous sampling has been undertaken. The EPA (1996) study did not identify stained soils or stressed vegetation at this location.

The PA/SI included collecting three surface soil samples, installing one groundwater monitoring well, and collecting a groundwater sample. The soil and groundwater samples were analyzed for VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO.



Current Use: Trees and grass

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and groundwater for this AOI.

2.1.17.45 FGGM 96 (OU-46) – FORMER INCINERATOR BUILDING – 1943; 21½ STREET

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996
 EBS 1998
 CSA 1999
 PA/SI 2010-2015

Contaminants of Potential Concern: metals and dioxins

Media of Concern: Soil and groundwater

Site Location: Grids H1 and H2, in the northeastern portion of the installation, 1,000 feet east of the intersection of 21½ Street and State Route 175 (Annapolis Road).

Site Description: Former Incinerator Building – 1943 was identified as an AOI in a 1998 EBS. The incinerator was present from 1947 to 1975 (Versar, 1999). The EPA (1996) study of the installation did not identify this incinerator, stained soils, or stressed vegetation in this area in any of the historic aerial photographs, although the outline of a building is visible in the 1943 through 1977 historic aerial photographs (EPA, 1996).

Previous Studies: Over the course of previous investigations at this site, nine subsurface soil samples were collected. A review of historical aerial photographs suggests that the former incinerator may have been west of the location sampled in the CSA.

The PA/SI included collecting five surface and six subsurface soil samples that were analyzed for metals and dioxins. In addition, three groundwater monitoring wells were installed, and groundwater samples were collected and analyzed for metals. Soil does not pose a risk at this AOI. The concentrations of chromium, cobalt, and manganese in groundwater cause excess risk at this AOI.



Former Incinerator -- 1943
 0 30 60 120 Feet

Current Use: None/vacant

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils and a SSI be conducted for groundwater for PAHs and metals including chromium speciation for this AOI. The SSI will further assess this AOI and determine if the AOI will move forward to the RI phase of CERCLA. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.46 FGGM 96 (OU-46) – STAINED SOILS ALONG 3RD STREET

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996
 Initial Response 2009
 PA 2009
 PA/SI 2010-2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil and groundwater

Site Location: Grid H5, in the southeast portion of the installation, along 3rd Street, between Chisholm Avenue and Pepper Road.

Site Description: Stained Soils along 3rd Street is an AOI because on 9 March 2009, discolored soils with an unusual odor were encountered during trenching operations for a communications duct bank. The location is near former Building 2227, a former vehicle maintenance shop. Along a 30-foot section of the trench, there appeared to be areas of petroleum seepage from the trench wall at a depth of 3 feet. Approximately 160 feet of excavated soil was screened with a photoionization detector (PID).

Previous Studies: Over the course of previous investigations at this AOI, eight subsurface soil samples (plus one duplicate sample) and one groundwater sample were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, di(2-ethylhexyl) phthalate, iron, arsenic, chromium, and manganese elevate the risk numbers above the site-specific action levels. Di(2-ethylhexyl) phthalate was detected above its MCL.

The PA/SI included collecting five subsurface soil samples, installing three groundwater monitoring wells and collecting groundwater samples. Soil and groundwater samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. The concentrations of bis(2-ethylhexyl) phthalate and arsenic in soil and chromium, arsenic, CCl₄, cobalt, manganese, thallium, and nickel in groundwater cause excess risk at this AOI.



Stained Soils along 3rd Street
 0 30 60 120 Feet

Current Use: Open field

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends this AOI move forward to the RI phase of CERCLA for soils and groundwater. The RI will further assess this AOI. After the RI, an FS, PP, and ROD will be completed. The ROD will recommend this site for either NFA or further action to comply with regulatory guidelines for remediation.

2.1.17.47 FGGM 96 (OU-46) – FORMER INCINERATOR SITE – REECE ROAD

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996
 Historical Records Review 2006
 Subsurface Soil Investigation 2006
 PA/SI 2010-2015

Contaminants of Potential Concern: Metals, dioxins, and furans

Media of Concern: Soil

Site Location: Grid G3, in the central part of the installation, north of Reece Road and west of the intersection of Reece Road and MacArthur Road.

Site Description: This AOI was labeled “incinerator” on the 1922–1923 War Games Map (Anon., 1922) and is shown at the west end of Incinerator Road, west of the intersection of Portland Road and Jessup Road. On the 1922–1923 map, MacArthur Road is identified as Jessup Road; the part of Reece Road east of Jessup Road is identified as Portland Road, and the part west of Jessup Road is identified as Incinerator Road.

In a 1942 map of Fort Meade (685th Engineer Company, 1942), this site is identified as the “C.W. Gas Cham” and is shown at the same location. There is no legend identifying what “C.W.” stands for.

Map 4-6 of the Historical Records Review report (Malcolm Pirnie, 2006a) incorrectly locates the site northeast of Site M Parcel 9 at the end of Reece Road, west of Cooper Avenue. The EPA (1996) study of the installation did not identify this incinerator, nor stained soils or stressed vegetation, in this area in any of the historic aerial photographs.

Previous Studies: Over the course of previous investigations at this AOI, three surface soil and 12 subsurface soil samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.

The PA/SI included collecting 6 surface soil samples that were analyzed for dioxins, furans, and metals.



Former Incinerator Site
 0 25 50 100 Feet

Current Use: Developed with housing, Larkin Road, and grass cover

Current Status: The Final PA/SI Report has been approved.

Cleanup/Exit Strategy: The Final PA/SI Report recommends NFA for soils for this AOI.

2.2 MILITARY MUNITIONS RESPONSE PROGRAM OPEN AOIS

2.2.1 FGGM 003-R (OU-40) – FORMER MORTAR RANGE MRS

2.2.1.1 FGGM 003-R-01 (OU-40) – MORTAR AREA MRS

Regulatory Driver: CERCLA

Environmental Investigations:

Geophysical Survey.....	2004
EBS.....	2007
SI.....	2007
RI.....	2008-2011
FFS.....	2012
PP.....	2012
ROD.....	2012
RD.....	2013

Remedial Action

Report (RAR)..... 2014

5-Year Review..... August 2016

Contaminants of Potential Concern: MEC

Media of Concern: Soil

Site Location: Grid F4, in the southern portion of the Munitions Response Area (MRA), extending from Mapes Road northwest.

Site Description: This AOI consists of the approximately 62-acre former training mortar range. The period of use for the Mortar Area MRS is estimated as the early 1920s to the early 1940s. Evidence supports that only practice mortar rounds were fired at the Mortar Area MRS. The firing point is estimated to be in the southwest corner of the Mortar Area MRS. Also, unused small arms ammunition was reportedly discarded at the MRS; however, no evidence supports the use of small arms ammunition at this MRS.

Previous Studies: Over the course of previous investigations, approximately 36 soil samples and two groundwater samples were collected and analyzed for selected metals and explosives in the Mortar Area MRS. Stakeholders confirmed NFA for munitions constituents (MC).

Current Use: A secure DoD facility is currently under construction in the northern portion. The southwest corner is a gas station, and the southeast corner remains undeveloped.



Current Status: The qualitative risk evaluation performed revealed a low probability for human receptors to encounter MEC on the MRS. The low probability result of this evaluation is compatible with current and determined or reasonably anticipated future use.

Cleanup/Exit Strategy: An RD for the selected response action consisting of LUCs with LTM was implemented in August 2013, and the Final RACR was signed by the Army and EPA in May 2014.

The first annual LTM inspection (visual inspection of engineering controls/signs and ground surface) occurred in September 2014, and the second annual inspection occurred in August 2015.

2.2.1.2 FGGM 003-R-02 (OU-40) – TRAINING AREA MRS

<p>Regulatory Driver: CERCLA</p> <p>Environmental Investigations:</p> <p>Geophysical Survey2004</p> <p>EBS2004</p> <p>SI2007</p> <p>RI2008-2011</p> <p>FFS2012</p> <p>PP2012</p> <p>ROD2012</p> <p>RD2013</p> <p>RAR2014</p> <p>5-Year ReviewAugust 2016</p> <p>Contaminants of Potential Concern: MEC</p> <p>Media of Concern: Soil</p> <p>Site Location: Grid F4, in the northern portion of the MRA, extending from Mapes Road northwest to Rockenbach Road. The Training Area MRS surrounds the Mortar Area MRS (see FGGM 003-R-01).</p> <p>Site Description: This AOI consists of the 260-acre Training Area MRS, where five munitions debris items were found, including practice grenades, an expended flare, and a small arms ammunition casings disposal pit. The practice grenades and expended flare are indicative of general troop training, and the small arms ammunition casing disposal pit is indicative of disposal.</p> <p>Previous Studies: Over the course of previous investigations, approximately 20 soil samples and 6 groundwater samples were collected in the Training Area MRS and analyzed for selected metals and explosives. Stakeholders confirmed NFA for MC in the RI.</p>	 <p style="text-align: center;">FGGM 003-R-02 - Training Area</p> <p style="text-align: center;">0 250 500 1,000 1,500 2,000 Feet</p> <p>Current Use: A secure DoD facility is currently under construction in the eastern portion of the MRS, and the western portion is already developed.</p> <p>Current Status: The qualitative risk evaluation performed revealed a low probability for human receptors to encounter MEC on the MRS. The low probability result of this evaluation is compatible with current and determined or reasonably anticipated future use.</p> <p>Cleanup/Exit Strategy: An RD for the selected response action consisting of LUCs with LTM was implemented in August 2013, and the Final RAR was signed by the Army and EPA in May 2014. The first annual LTM inspection (visual inspection of engineering controls/signs and ground surface) occurred in September 2014, and the second annual inspection occurred in August 2015.</p>
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2.2.2 FGGM 007-R-01 (OU-44) – INACTIVE LANDFILL 2

Regulatory Driver: CERCLA

Environmental Investigations:

PA	1989
SI	1991
RI	1998
DD Safety Precautions	1998
ROD	1999
Long-Term Monitoring Plan (LTMP)	2001
Maintenance Inspection Reports	yearly
MMRP Historical Records Review	2006
MMRP SI	2007

Contaminants of Potential Concern: MEC

Media of Concern: Soil

Site Location: Grid E6, east of State Route 198, south of State Route 32, and south of the Tipton Airfield, on approximately 10 acres of land north of Wildlife Loop.

Site Description: IAL2 was initially operated as a soil borrow area starting around 1938.

Sometime after 1952, the area was operated as an unlined rubble disposal area, but it reached its maximum capacity by 1963. Continued disposal activity occurred after 1980 in the northern portion of IAL2, where graded and disturbed areas are visible in 1986 aerial photographs.

During the RI fieldwork, piles of rubble (brush, concrete, and asphalt debris), which appear to be of more recent origin, were observed in a marshy area on the north side of IAL2.

The site could not be cleared of ordnance due to large amounts of rubble debris and wetlands.

This site is currently in the MMRP.

IAL2 is also part of AEDB-R number FGGM 31, along with IAL3. FGGM 31 is discussed separately in this SMP because it is funded under the BRAC program. IAL3 is a BRAC site, and information about IAL3 can be found under the BRAC section (section 2.2.2) of the SMP. Groundwater at IAL2 and IAL3 is covered under FGGM 31.



FGGM 007-R-01 - Inactive Landfill 2
0 125 250 300 750 1,000 Feet

Previous Studies: Over the course of previous investigations, a fence was constructed around IAL2. During the 2014 inspection, the fence was intact, but vegetation was observed on portions of the fence. The 2014 Annual Maintenance Inspection Report recommended to continue inspection, clear vegetation from the fence line, remove downed trees, and replace faded signs.

Current Use: Grass, trees, and wetlands

Current Status: A maintenance inspection of the fence and signage surrounding IAL2 is conducted annually. In 2012, 2014, and 2015, vegetation was cleared along the perimeter fence and the fence was repaired. Groundwater is currently monitored under a 1999 ROD for FGGM 31.

Cleanup/Exit Strategy: Future work includes annual maintenance inspections as indicated in the schedule in Section 3. Maintenance, if required, will be conducted as recommended in the annual reports.

2.3 BASE REALIGNMENT AND CLOSURE OPEN AOIs

2.3.1 FGGM 10 (OU-8) – INACTIVE LANDFILL 1

Regulatory Driver: CERCLA

Environmental Investigations:

PA.....	1989
SI.....	1991
RI.....	1998
DD Safety Precautions.....	1998
ROD.....	1999
LTMP.....	2001, 2012
LTM.....	2004-2015
5-Year Reviews.....	2005, 2011, 2016
Explanation of Significant Difference (ESD).....	2014
Land Use Control Remedial Design (LUCRD).....	2015

Contaminants of Potential Concern: Arsenic, iron, manganese, and MEC

Media of Concern: Groundwater

Site Location: Grid E5, east of State Route 198 and south of State Route 32, in the western portion of the Tipton Airfield Parcel (TAP), between Bald Eagle Drive and the Little Patuxent River.

Site Description: IAL1 was used as an unlined sanitary landfill from approximately 1950 to 1964. No information has been found on the types of material disposed of at this location. A small concrete blockhouse, formerly used as a communications building, is present on the northwest corner of IAL1.

Previous Studies: Over the course of previous investigations at this site, an earthen MEC safety cap was installed over IAL1.

Current Use: Inactive

Current Status: LUCs that prohibit conducting any surface or subsurface excavations, digging, well drilling, or other disturbance of soil, or areas below paved surfaces have been established and are enforced. Annual LTGM has been implemented. The Final TAP ESD was submitted in May 2014. The ESD modifies the June 1999 ROD to address 1) the need



FGGM 10 - Inactive Landfill 1 - Tipton Army Airfield
0 75 150 300 Feet

for sweeps for ordnance, 2) appropriate disposal of ordnance if discovered, and 3) land use control requirements. The Army submitted a TAP LUCRD in June 2015 that details how to implement, maintain, and enforce the LUCs at IAL1 and incorporate them into the CERCLA process. The 5-Year Review is in progress and a draft will be issued to the regulators on or before February 2016 and a Final will be issued to the regulators in September 2016.

Cleanup/Exit Strategy: Continue the corrective measures O&M (LUCs with LTGM on an annual basis) per the results of the September 2011 TAP 5-Year Final Review. Inspection and monitoring of the LUCs will be implemented and documented in accordance with the LUCRD. Finalize 5-Year Review Report and LTGM Report in FY16.

2.3.2 FGGM 20 (OU-15) – ORDNANCE DEMOLITION AREA

Regulatory Driver: CERCLA

Environmental Investigations:

SI	1994
Sampling Visits	1996, 1999, 2000,
.....	2002, 2004
RI/FS	2002
FFS	2002
LTMP	2003, 2012
LTM	2004-2015
PP	2011
ROD	2011
LUCRD	2013
Interim Remedial Action Completion Report (IRACR)	2013
5-Year Review	September 2016

Contaminants of Potential Concern: Cyclotrimethylene trinitramine (RDX), trinitrotoluene (TNT), amino-DNTs, chlorinated VOCs, cadmium, and MEC.

Media of Concern: Groundwater

Site Location: Grid F10, in the southern part of the BRAC parcel, in an otherwise undeveloped wooded area south of Wildlife Loop Road.

Site Description: The Ordnance Demolition Area (ODA) covers 2.5 acres and is bounded by an outer berm, which is approximately 8 feet high and constructed of rubble and earthen material. The area outside the berm is heavily forested and contains wetlands to the east and south. An inner berm, constructed similarly to the outer berm, bounds the demolition pit. The demolition pit area inside the inner berm is approximately 40 feet by 80 feet and predominantly filled with sand.

Previous Studies: Over the course of previous investigations at this site, soil and groundwater samples were collected for the RI, FFS, and LTGM.

Current Use: Inactive

Current Status: The Decision Document of 2005 selected MNA as a remedial alternative in conjunction with Institutional Controls that limit the use of groundwater until Remedial Action Objectives (RAOs) have been met. The Army rescinded the 2005 Decision Document and



FGGM 20 - Ordnance Demolition Area
0 40 80 160 Feet

submitted a Final Proposed Plan in FY11. A Final ROD was submitted in September 2011 that established MNA as the groundwater remedial alternative. The Army submitted a Final LUCRD in June 2013 to better implement, maintain, and enforce LUCs at the ODA and incorporate them into the CERCLA process. The Army submitted a Final IRACR in July 2014.

Cleanup/Exit Strategy: Ten wells will be sampled until compliance with RAOs has been established. Future work includes continuing the corrective measures O&M and MNA in accordance with the approved ROD. In addition, 5-year reviews will continue, and inspection and monitoring of the LUCs will be documented in accordance with the LUCRD. Finalize 5-Year Review Report FY16.

2.3.3 FGGM 31 (OU-17) – INACTIVE LANDFILLS 2 AND 3

Regulatory Driver: CERCLA

Environmental Investigations:

Enhanced PA	1989
Superfund Record of Decision	1998
RI	1998
ROD	1999
LTMP	2001, 2012
MEC Sweeps	2001, 2006, 2011
5-Year Reviews	2005, 2011
ESD	2014
LTM	2004-2015
Maintenance and Repairs	2014
LUCRD	2015
5-Year Review	2016

Contaminants of Potential Concern: Benzene, 1,1,2,2-Tetrachloroethane, CCl₄, cis-1,2-dichloroethene, vinyl chloride, arsenic, iron, manganese, and MEC

Media of Concern: Groundwater

Site Location: Grids E5 and F5, in the TAP, in the eastern portion of the runway area.

Site Description: FGGM 31 includes IAL2 and IAL3. Information about IAL2 can be found under the MMRP section (Section 2.2.2) of the SMP.

IAL3 is 78 acres and originally used as a sand borrow area. During the late 1940s and 1950s, the area was used as a sanitary and “leaf-dump” landfill. Tipton Army Airfield was constructed over the fill area in 1963. Landfill materials were removed from beneath all runway construction areas for structural reasons, but landfill materials are still present in areas adjacent to the runways.

Previous Studies: The Decision Document (U.S. Army, 1998) stated that surface sweeps will be performed at the landfill at years 3 and 7, and every 5 years thereafter, to remove any potential MEC that might migrate to the surface. Ordnance sweeps were conducted in 2001, 2006, and 2011 at IAL3.

Current Use: Airport runway and grassy areas

Current Status: The ROD requires 5-year reviews and LTGM. The Final TAP ESD was submitted in May 2014. The ESD modifies the December 1998 and June 1999 RODs for IAL3 to address 1) the needs for sweeps of ordnance; 2) appropriate disposal of ordnance if discovered;



FGGM 31 (OU-17) - Inactive Landfills 2 and 3
0 250 500 1,000 1,500 2,000 Feet

and 3) land use control requirements. The Army completed the surface settling in the vegetated (grass) sections of the landfill and Final Report was accepted in December 2014. The Army submitted a TAP LUCRD in June 2015 to implement, maintain, and enforce the LUCs at IAL1 and incorporate them into the CERCLA process. The 5-Year Review is in progress and a final will be issued to the regulators in September 2016.

Cleanup/Exit Strategy: Future work includes continuation of the Corrective Measure O&M, which includes LTGM, 5-year reviews, and annual maintenance inspections in accordance with the June 1999 ROD. Inspection and monitoring of the LUCs will be implemented and documented in accordance with the LUCRD. The next MEC sweep is scheduled for FY16. Finalize 5-Year Review Report in FY16.

2.3.4 FGGM 81 (OU-33) – CFD

Regulatory Driver: CERCLA

Environmental Investigations:

PA	1989
SI	1992
RI	1992 and 1998
Action Memorandum	2000-2001
PP	2000
ROD	2000
LTMP	2002, 2012
5-Year Review	
.....	2009, 2011, and September 2016
LTM	2004-2015

Contaminants of Potential Concern:

Chlorinated VOCs, metals, and MEC

Media of Concern: Groundwater and surface water

Site Location: Grids G7 and H7, in the southeastern portion of the BRAC parcel along Boundary Road. The Clean Fill Dump (CFD) covers approximately 13 acres and is partially within the boundaries of the Firing Range 9 downrange fan.

Site Description: The CFD was used from approximately 1972 until approximately 1985 for the disposal of miscellaneous debris.

Previous Studies: Previous studies have resulted in a ROD that recommended annual LTGM and 5-year reviews.

Current Use: Inactive

Current Status: The ROD (U.S. Army, 2000b) identified the selected remedial alternative for the CFD OU (U.S. Army, 2000a) as “NFA with monitoring.” The Lower Patapsco aquifer is monitored on an annual basis. The ROD incorporates the 2000 *Action Memorandum: Safety Precautions to Be Taken at Clean Fill Dump*, which includes provisions for residential use restrictions, groundwater use limitations, and UXO issues (U.S. Army, 2000b).



FGGM 81 - Clean Fill Dump
0 60 120 240
Foot

MEC LUCs for the MMRP portion (FGGM 001-R-01) of the CFD will be addressed under the LUCRD for the High Explosive Impact and Disposal (HEI) Area (FGGM 002-R-01). The 5-Year Review is in progress and a final will be issued to the regulators in September 2016.

Cleanup/Exit Strategy: Continue the corrective measures O&M (LUCs with LTGM on an annual basis) per the results of the September 2011 CFD Final 5-Year Review. Finalize 5-Year Review Report in FY16.

2.3.5 FGGM 85 (OU-35) – MEC TIPTON ARMY AIRFIELD

Regulatory Driver: CERCLA

Environmental Investigations:

ROD	1999
Historical Records Review	2006
5-Year Review	2011
ESD	2014
LUCRD	October 2015
IRACR	March 2016
5-Year Review	September 2016
IAL1 and IAL3 Annual Inspection Report	May 2016
MEC Sweep LTM Report	March 2016

Contaminants of Potential Concern: MEC

Media of Concern: Soil, groundwater, and surface water

Site Location: Grid E5, east of State Route 198 and south of State Route 32.

Site Description: This AOI is composed of sites HHA, Fire Training Area (FTA), IAL1, IAL2, and IAL3. It is also bisected by the Little Patuxent River.

Previous Studies: Over the course of previous investigations at this site, an earthen MEC safety cap was installed over IAL1, a fence is installed and maintained around IAL2, and surface sweeps for MEC have been conducted in IAL3.

Current Use: Public airfield

Current Status: The soil safety cover at IAL1 and IAL3 is inspected and sweeps of a portion of the Little Patuxent River are conducted yearly. The TAP Final ESD was submitted in May 2014. In addition, 5-year reviews are conducted. The Army submitted a TAP LUCRD in June 2015 to better implement, maintain, and enforce the MEC LUCs. The 5-Year Review is in progress and a final will be issued to the regulators in September 2016.



FGGM 85 - UXO Tipton Army Airfield
0 600 1,200 2,400 Feet

Cleanup/Exit Strategy: MEC sweeps and inspections will continue for the foreseeable future. The river sweeps will continue to be performed annually. Finalize 5-Year Review Report in FY16.

2.3.6 FGGM 94 (OU-37) – TRAP AND SKEET RANGE 17

Regulatory Driver: CERCLA

Environmental Investigations:

Ordnance Survey	1995
Site-Wide Groundwater Study	1999
Human Health Risk Assessment/Ecological Risk Assessment (HHRA/ERA)	2004, 2014
Statement of Work for RI	2008, 2013
RI/FS	2011, 2014
PP	2014
ROD	2014
LUCRD	2016
Remedial Action Completion Report	2017

Contaminants of Potential Concern: Arsenic, lead, copper, PAHs, nitroglycerin, and MEC

Media of Concern: Soil

Site Location: Grid D7, in the central portion of the PRR-NT.

Site Description: This AOI consists of the remnants of trap and skeet ranges. The skeet range was present as early as 1965, and the trap range was present as early as 1984. Features that were present include a high house, a low house, cement walkways, and a rather heavily forested area.

Previous Studies: Over the course of previous investigations at this site, 74 X-ray fluorescence samples for lead, arsenic, an copper, and 10 lead shot samples were collected for analysis during the 2004 HHRA/ERA study; 237 samples of iron, arsenic, lead, and copper were collected for the 2014 HHRA/ERA; and 110 lead shot samples were collected for analysis for the 2011 draft RI/FS. MDE identified the need to sample for PAHs and explosives (e.g., nitroglycerin) during the regulatory review of the Draft RI/FS. The Army, in cooperation with EPA and MDE, has agreed that the site required further investigation. A Final Work Plan Addendum was submitted to the regulators in April 2013. In May 2013, the Army collected additional soil samples for PAHs and nitroglycerin from six Decision Units.



FGGM 94 - Trap and Skeet Range 17
0 150 300 600 Feet

Current Use: Inactive

Current Status: A Final RI/FS was submitted in June 2014 to determine human health and ecological risk per CERCLA, the Oil and Hazardous Substances Pollution Contingency Plan, and Army procedures. The Army submitted a Final PP and ROD in September 2014. A Draft LUCRD was issued to regulators in September 2015. Soil Remediation will be complete in 2016 and a Draft Remedial Action Report will be issued to regulators on or before November 2016.

Cleanup/Exit Strategy: Remedial Construction will occur in September FY15. Future work includes finalizing the LUCRD in FY16 and Remedial Action Report in FY17.

2.3.7 FGGM 001-R-01 (OU-38) – CFD MMRP

Regulatory Driver: CERCLA

Environmental Investigations:

PA	1989
SI	1992
RI	1992 and 1998
Action Memorandum	2000-2001
PP	2000
ROD	2000
LTMP	2002, 2012
5-Year Review	2011
LTM Report	2004-2015

Contaminants of Potential Concern: MEC

Media of Concern: Groundwater

Site Location: Grids G7 and H7, in the southeastern portion of the BRAC parcel along Boundary Road. The CFD covers approximately 13 acres and is partially within the boundaries of the Firing Range 9 downrange fan.

Site Description: The CFD was used from approximately 1972 until 1985 for the disposal of miscellaneous debris.

Previous Studies: Previous studies have resulted in a ROD and LTGM with 5-year reviews.

Current Use: Inactive

Current Status: The ROD (U.S. Army, 2000b) incorporates the Action Memorandum (July 2000), which addresses the risks related to MEC at the CFD and the protection of human health and the environment. The Action Memorandum establishes MEC land use restrictions and their enforcement. MEC LUCs for the CFD MMRP will be included in the HEI Area Proposed Remedial Action Plan (PRAP).



FGGM 81 - Clean Fill Dump
0 60 120 240 Feet

Cleanup/Exit Strategy: The Army intends to transfer the property to DOI. After transfer, FGGM 001-R-01 will be administratively closed, and MEC-related work at the CFD will be associated with FGGM 002-R-01 – HEI Area. Finalize the HEI Area PRAP to better enforce and maintain the existing MEC LUCs at the PRR-NT parcel, which includes the CFD MMRP OU. Once the HEI Area ROD is approved, the Army will submit a LUCRD.

2.3.8 FGGM 002-R-01 (OU-39) – HIGH EXPLOSIVE IMPACT AND DISPOSAL AREA

Regulatory Driver: CERCLA

Environmental Investigations:

Ordnance Survey..... 1992-1993
 Engineering Evaluation..... 2001
 MEC Survey..... 2001
 MEC LUC Action Memo..... 2001
 PP..... January 2016
 ROD..... September 2016
 Draft Final LUCRD..... February 2017

Contaminants of Potential Concern: MEC

Media of Concern: Soil

Site Location: Grids B5-H5, A6-I6, A7-H7, C8-G8, C9-G9, D10-G10; FGGM 002-R-01 consists of the approximately 8,100-acre PRR-NT, south of Fort Meade and the Tipton Army Airfield parcel.

Site Description: This AOI consists of the PRR-NT, which is composed of two areas, one totaling 7,600 acres and the other about 500 acres. Both areas were transferred to the DOI in the early 1990s. Numerous ordnance and explosive (OE) training and MEC items were found in this tract during site investigations. The potential munitions suspected on the PRR-NT are representative of troop training and fighting using live and practice items designed to simulate a service item in weight and ballistic properties.

These items may be inert or have a small quantity of explosive filler.

Previous Studies: Over the course of previous investigations at this site, surveys were conducted to locate, identify, and remove MEC located on the surface and within a depth of 6 inches below ground surface. A NTCRA of MEC to a depth of 6 inches was completed for 24 areas in the PRR-NT identified by the U.S. Fish and Wildlife Service (USFWS) as high traffic areas.

Current Use: Wildlife refuge

Current Status: A 2001 Action Memorandum selected LUCs with surface and subsurface clearance to depth in selected areas.



FGGM-002-R-01 -
 High Explosive Impact and Disposal Area
 0 2,500 5,000 10,000
 Feet

Cleanup/Exit Strategy: Continue measures outlined by the LUCs, including educating workers and recreational users about potential residual OE hazards that may be associated with the property and whom to notify if any OE is encountered. A Final PRAP will be submitted in FY15 and a ROD will be submitted in FY16 for the HEI Area to better enforce and maintain the existing MEC LUCs at the PRR-NT parcel, which includes the CFD MEC LUCs. Once the HEI Area ROD is approved, the Army will submit a LUCRD in FY17. Inspection, monitoring, and documentation procedures for the MEC LUCs will be incorporated into the CERCLA process for the HEI Area.

2.4 UNASSIGNED OPEN AOIs

2.4.1 OFF-POST GROUNDWATER INVESTIGATION – NEVADA AVENUE AREA

Regulatory Driver: CERCLA

Environmental Investigations:

Interim Measures 2009-2011

Groundwater Investigation 2011-2015

Contaminants of Potential Concern: VOCs Media of Concern: Groundwater

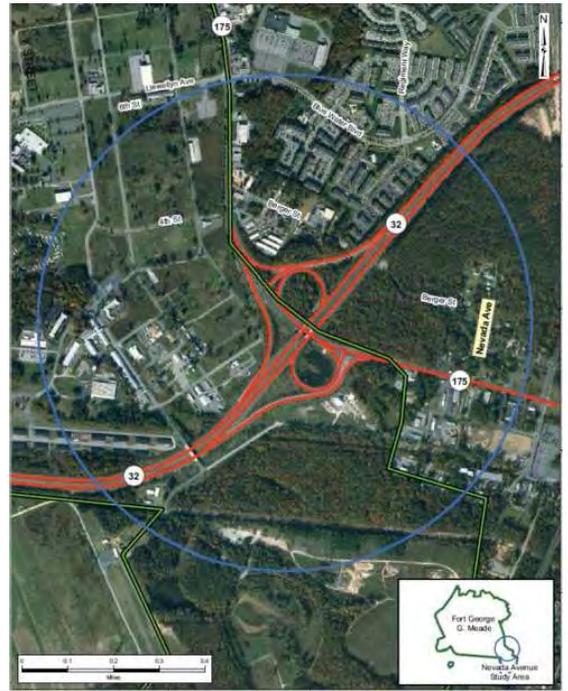
Site Location: The area surrounding Nevada Avenue, Odenton, MD.

Site Description: The Nevada Avenue Area consists of the area surrounding the one private drinking water well on Nevada Avenue, in Odenton, with a PCE concentration recorded above the MCL in 2009. This area contains existing monitoring wells both on- and off-post. The area is approximately 0.9 mile in radius.

Previous studies: Interim Measures activities began in June 2009 to investigate groundwater contamination identified in MW-125d/123s and MW-126d/124s, along the southeastern boundary of FGGM, and are ongoing. As required by the EPA, during the Interim Measures activities, 62 private wells were sampled within a 1-mile radius of MW-125d/123s and MW-126d/124s. PCE near or exceeding the EPA MCL, was detected in three private wells on Nevada Avenue. Because the Nevada Avenue Study Area is not projected downgradient of MW-125d/123s and MW-126d/124s and their associated known or suspected sources on FGGM, the PCE detected in the samples collected from this area is concluded to be associated with a separate source area. Other VOCs, such as trichloroethene, cis-1,2-dichloroethene, total xylenes, mp-xylene, and toluene, were also detected, but at levels below the EPA MCL; therefore, PCE was determined to be the primary contaminant of concern for the investigation.

Current Use: Residential, light industrial, and commercial

Current Status: The groundwater investigation field activities were completed in 2013. Five deep and one shallow monitoring well were installed within the study area (one shallow and two deep on Fort Meade and three deep off-post within the study area). Groundwater samples collected in July and September 2013 from the newly installed wells were analyzed for VOCs. Water levels were also measured in 19 existing wells and the 6 newly



installed monitoring wells during the two groundwater sampling events. The results of the water level measurements suggest that the groundwater in the study area is flowing in a south-southeasterly direction. PCE was detected in all of the off-post wells, with the highest concentration (10.5 µg/L) detected in the off-post well directly upgradient from Nevada Avenue. PCE was not detected in the on-post study area wells. Based on the analytical results and the observed groundwater flow direction, it was concluded that the source of the PCE is originating from a location north-northwest of Nevada Avenue, and not from the investigated area on Fort Meade. The regulatory comments received on the Draft Report indicate additional investigative activities are required to determine if FGGM is the PCE source. Monthly sampling of the three affected private wells and providing bottled water service to those residents (both ongoing since 2009) will continue.

Cleanup/Exit Strategy: Perform groundwater investigation or use existing data to confirm the contamination is not emanating from FGGM. Monitoring will continue and an exit strategy will be determined based on the outcome of the investigation.

2.4.2 GRANT STREET AT BUILDING 8484 – SPILL NOTIFICATION

Regulatory Driver: CERCLA

Environmental Investigations:

Reportable Spill Notification 2009

Spill Notification Response 2010

Contaminants of Potential Concern: Not determined

Media of Concern: Soil

Site Location: Grid F5, in the southwestern portion of the installation along Grant Street at Building 8484.

Site Description: A small metal box containing unlabeled paint containers was found in a duct bank trench being excavated along Grant Street at Building 8484. ED personnel observed solidified paints as well as a minor amount of liquid coming from the paint storage box.

Previous Studies: Over the course of previous investigations at this site, a maximum PID reading of 224 units was observed, and a grab sample was collected from the bottom of the trench.



Grant Street at Building 8484
(Spill Notification, September 2009)

0 25 50 100 Feet

Current Use: Roadway shoulder

Current Status: On 7 June 2010, EPA concurred that analytical results indicate that no CERCLA release has occurred at the subject site. This site is closed with respect to CERCLA.

Cleanup/Exit Strategy: NFA is required for this AOI.

2.4.3 20TH STREET AT ROUTE 175 NEAR BUILDING 1978 – SPILL NOTIFICATION

Regulatory Driver: CERCLA

Environmental Investigations:

Reportable Spill Notification 2009

Spill Notification Response 2010

Contaminants of Potential Concern: Not determined

Media of Concern: Soil

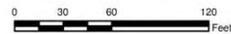
Site Location: Grid H2, in the northeastern portion of the installation along Route 175 and 20th Street near Building 1978.

Site Description: Discolored soil was discovered in a duct bank trench excavated along Route 175 and 20th Street, beginning approximately 2 feet below ground surface and extending below the depth of the trench.

Previous Studies: Over the course of previous investigations at this site, the maximum PID level was 130 units, and a grab sample was collected from the bottom of the trench for analysis.



20th Street at Route 175 near Building 1978
(Spill Notification, September 2009)



Current Use: Grass field

Current Status: On 7 June 2010, EPA concurred that analytical results indicate that no CERCLA release has occurred at the subject site. This site is closed with respect to CERCLA.

Cleanup/Exit Strategy: NFA is required for this AOI.

2.4.4 1ST STREET IN FRONT OF BUILDING 195 – SPILL NOTIFICATION

Regulatory Driver: CERCLA

Environmental Investigations:

Reportable Spill Notification..... 2009

Spill Notification Response..... 2010

Contaminants of Potential Concern: Not determined

Media of Concern: Soil

Site Location: Grid H5, in the southeastern portion of the installation on 1st Street in front of Building 195.

Site Description: Discolored soil in a 2-foot deep duct bank trench being excavated along 1st Street between Chisholm Avenue and Saxton Road was discovered beginning approximately 6 inches below ground surface and extending approximately 10 inches below ground surface on both sides of the trench. The discoloration appeared to be associated with existing asphalt paving and sub-base materials.

Previous Studies: Over the course of previous investigations at this site, one grab sample was collected from the bottom of the trench for analysis.



1st Street at Building 195 Release Site (September 2009)



Current Use: Roadway shoulder

Current Status: On 7 June, 2010, EPA concurred that analytical results indicate that no CERCLA release has occurred at the subject site. This site is closed with respect to CERCLA.

Cleanup/Exit Strategy: NFA is required for this AOI.

2.5 INSTALLATION RESTORATION PROGRAM AOIS DESIGNATED FOR NFA

2.5.1 FGGM 03 (OU-6) – WATER TREATMENT PLANT, BUILDING 8688

Regulatory Driver: CERCLA

Environmental Investigations:

PA 1980-1982
IRA 1994
SWMU Study 1996
Sampling Visits 1999
SI 2001
PA/SI 2010-2014

Contaminants of Potential Concern: None identified

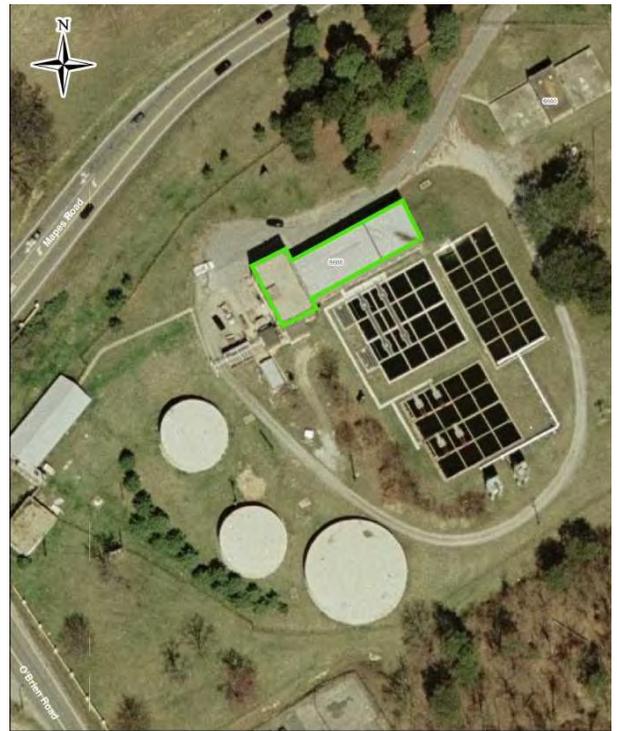
Media of Concern: None identified

Site Location: Grid F4, in the southwestern portion of the installation at the southeast corner of O'Brien and Mapes Roads.

Site Description: Building 8688 – OU-6 (SWMUs 129 and 130) is a water treatment plant constructed in 1941. The facility stores and uses lime and chlorine. An on-site laboratory stores acids and buffers for test purposes.

Building 8688 was identified as a SWMU (BCM, 1996) because of routine discharge of waste to the sanitary sewer.

Previous Studies: Over the course of previous investigations at this site, three surface soil samples (plus one duplicate sample) and nine subsurface soil samples were collected and analyzed. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.



FGGM 03 - Building 8688 - Water Treatment Plant
0 40 80 160 Feet

Current Use: Water treatment plant

Current Status: On 16 July 2012, EPA concurred that analytical results indicate that no CERCLA release has occurred at this AOI. This AOI is closed with respect to CERCLA.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.2 FGGM 05 (OU-2) – FORMER TROOP BOILER PLANT, BUILDING 8481

Regulatory Driver: MDE

Environmental Investigations:

Evaluation of Groundwater System.....1996
 Groundwater Monitoring2001
 Well Removal/Replacement.....2002
 Groundwater Sampling Event2008
 Site Model and Assessment Report... 2008

Contaminants of Potential Concern: Benzene, toluene, ethylbenzene, and xylenes (BTEX); methyl tert-butyl ether (MTBE); naphthalene; caustic soda; sodium sulfite; phosphates; and sodium hydroxide

Media of Concern: Soil and groundwater

Site Location: Grid F5, in the southwestern portion of the installation, south of Simonds Street and east of Grant Road.

Site Description: Former Building 8481 (SWMU 112/113) was constructed in the 1940s as a boiler plant fueled by coal and then converted to fuel oil in the 1960s. This AOI also includes OWS-14 and WR-14 (SWMU 114), a storage shed (no building number) for flammable material, nine USTs, and one 500-gallon diesel fuel tank used for the emergency generator.

In 1991, a 1,500-gallon waste oil UST and a 20,000-gallon No. 2 fuel oil tank failed precision testing. The tanks were excavated, and it was determined that they had been leaking for several years.

Previous Studies: Over the course of previous investigations at this site, 29 MWs were installed, a recovery system to remove floating and dissolved product was installed and operated from 1993 to 1997, and a solar-powered oil removal skimmer system was operated from 2001 to 2003. Groundwater was sampled from eight wells in March, April, August, and October 2008, and oil absorbent booms were inserted into four of the MWs.



FGGM 05 - Troop Boiler Plant
 0 25 50 100 Feet

Current Use: Vacant land / parking lot

Current Status: On 9 December 2009, MDE OCP, having determined that site conditions met site remedial objectives and seven MDE Maryland Environmental Assessment Technology risk factors, issued a Notice of Compliance for FGGM 05.

Cleanup/Exit Strategy: This AOI has been closed, the wells have been abandoned, and the system components have been removed. NFA is required.

2.5.3 FGGM 14 (OU-11)–CONTROL HAZARDOUS SUBSTANCE STORAGE FACILITY, BUILDING 6527

Regulatory Driver: CERCLA

Environmental Investigations:

PA 1980-1982
 SI 1980-2011
 SWMU Study 1996
 Hazardous Waste Closure Report 1999
 Sampling Visit 2000
 Data Gap Investigation 2002
 PA 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F4, in the southern portion of the installation on Taylor Avenue between Simonds and MacKall Streets.

Site Description: Former Building 6527 (SWMU 104/OU-11) was used as a short-term (90-day) storage facility for hazardous and non-regulated chemicals before handling and shipping for off-site disposal. The facility handled wastes from the PCB removal program and also accepted paints, oils, oil filters, antifreeze, and fluorescent lights and ballast. The building was demolished in the late 1990s.

Previous Studies: Over the course of previous investigations at this AOI, 20 surface soil samples and four subsurface soil samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels. Building 6527 obtained clean closure in 1999.



Building 6527 - Control Hazardous substance Storage Facility
 0 25 50 100 150 200 Feet

Current Use: Parking lot

Current Status: On 5 October 2011, EPA concurred that analytical results indicate that no CERCLA release has occurred at this AOI. This AOI is closed with respect to CERCLA.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.4 FGGM 19 (OU-14) – ADVANCED WASTEWATER TREATMENT FACILITY

Regulatory Driver: CERCLA

Environmental Investigations:

PA	1980-1982
SI	1980-2012
SWMU Study	1996
RFA 3 rd Phase	1999
Geophysical Survey	2004
PA/SI	2010-2014

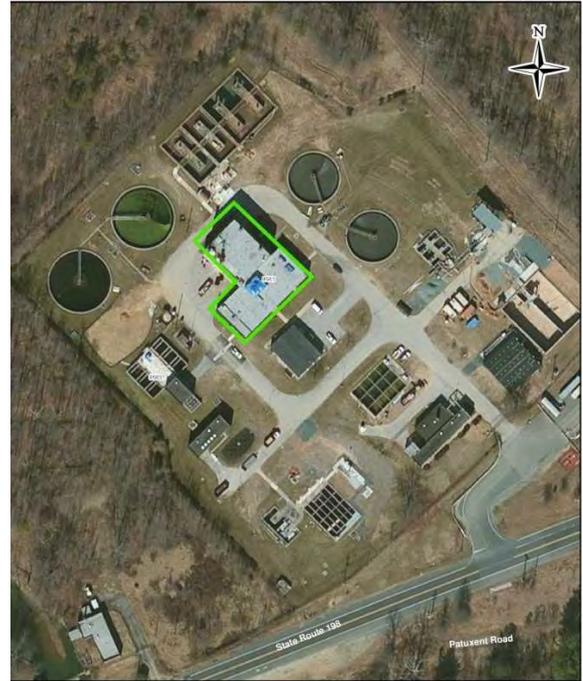
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid E4, in the southwest portion of the installation, approximately 600 feet southwest of State Routes 32 and 198.

Site Description: FGGM 19 is identified as the Advanced Wastewater Treatment Facility. FGGM 19 includes Building 9581 – Wastewater Treatment Plant (also identified as SWMU 138). All future environmental investigations and remediation activities for FGGM 19 are covered under SWMU 138.

Previous Studies: Over the course of previous investigations at this site, one surface soil sample, 18 subsurface soil samples, and 9 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic and chromium elevate the risk numbers above the site-specific action levels.



Building 9581 - Wastewater Treatment Plant
0 60 120 240 Feet

Current Use: Wastewater treatment facility

Current Status: The AEDB-R number FGGM 19 has been administratively closed. All further action at this AOI is covered under SWMU 138.

Cleanup/Exit Strategy: NFA for FGGM 19.

2.5.5 BUILDINGS 4552 AND 4553 PHOTOGRAPHIC LABORATORY, PART OF FGGM 36 (OU-20)

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....	1996
Historic Aerial Photograph Study.....	1996
RFA 3 rd Phase.....	1999
Data Gap Investigation.....	2002
PA.....	2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid G4, in the southeastern portion of the installation, northwest of the intersection of Llewellyn and Cooper Avenues.

Building 4553 (Non-SWMU 11) is part of FGGM 36, which also includes Building 6530 (SWMUs 105-108). Building 6530 (SWMUs 105-108) is discussed separately.

Site Description: Building 4553 was not identified as a SWMU in the 1996 SWMU study (BCM, 1996) because no routine waste is stored or produced at this AOI. However, it was investigated as part of the SWMU study and included in the SWMU report (BCM, 1996). BCM indicated there were no spills or reported releases in the area surrounding this building.

Current and past use of Building 4553 consisted of support facilities, primarily administrative, for intelligence agencies. It typically stored cleaners and office supplies. There are no reports of pesticides being stored at this building.

Previous Studies: There had never been a release of hazardous substances resulting in contamination to soil, groundwater, or surface water at this AOI (BCM, 1996). The EPA reviewed historic aerial photographs (from 1938 to 1995) of Fort Meade and found no stains, stressed vegetation, debris, solid waste, or other areas of environmental concern at this AOI (EPA 1996).



Building 4553
0 30 60 120
Feet

Current Use: Administrative

Current Status: EPA approved NFA for this AOI on 20 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.6 FGGM 75 (OU-30) – UNDERGROUND STORAGE TANKS PRIOR TO 1984

<p>Regulatory Driver: CERCLA</p> <p>Environmental Investigations:</p> <p>Environmental Restoration, Army.....2008</p> <p>UST Facility Summary2010</p> <p>PA.....2012</p> <p>Contaminants of Potential Concern: Gasoline, diesel fuel, and oil</p> <p>Media of Concern: Soil</p> <p>Site Location: Underground Storage Tanks prior to 1984 were located throughout the installation.</p> <p>Site Description: In July 1985, the EPA promulgated 40 Code of Federal Regulations 280, which required the registration of all USTs used for dispensing regulated substances. The State of Maryland published UST regulations in 1984. USTs had to be registered, and among the requirements for UST registration are tank and line leak detection requirements, spill and overflow protection equipment, and maintaining tank release detection records. FGGM 75 consists of USTs prior to 1984 that had leaked or potentially leaked product to the environment. Since 1984, all USTs under the control of FGGM DPW have been closed, and leaking USTs have been remediated. The installation-wide conversion from heating oil to natural gas resulted in the majority of these UST closures. Only seven active USTs are currently on installation under the jurisdiction of FGGM DPW. All seven USTs were installed after 1984.</p> <p>Previous Studies: Numerous samples were collected throughout the time the USTs were closed out. Results were presented to MDE with closeout documents.</p>	<p>No image available - these are multiple sites throughout the installation.</p> <hr/> <p>Current Use: The sites of the former USTs are used for installation support functions.</p> <p>Current Status: The MDE has no open UST cases with FGGM DPW. EPA approved NFA for this AOI on 23 February 2012.</p> <p>Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.</p>
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2.5.7 FGGM 95 (OU-45) – FORMER LANDFILL SITES

2.5.7.1 FGGM 95 (OU-45) – POSSIBLE DUMP SITE C – 1957

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

Geophysical Investigation 2004

PA 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F2, in the northern portion of the installation, adjacent to the intersection of Evans Court and Leslie Road.

Site Description: Possible Dump Site C – 1957 was identified as an AOI because the EPA (1996) historic aerial photograph study of the installation listed “possible solid waste” at this location during an analysis of a 1957 aerial photograph. The EPA (1996) study did not identify stained soils or stressed vegetation in this area in any of the historic aerial photographs.

Previous Studies: A geophysical investigation of Possible Dump Site C – 1957 did not identify any geophysical anomalies on the AOI, except for a few features associated with utilities (Versar, 2004a). There is little geophysical evidence to suggest that this AOI is a former dump or landfill.



Possible Dump Site C - 1957
0 50 100 200
Feet

Current Use: Grass, trees, portions of Evans Court and Leslie Road, and buildings

Current Status: EPA approved NFA for this AOI on 15 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.7.2 FGGM 95 (OU-45) – POSSIBLE DUMP SITE D – 1957

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

Geophysical Investigation 2004

PA 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F2, in the northern portion of the installation, on Riordan Court.

Site Description: Possible Dump Site D – 1957 was identified as an AOI because the EPA (1996) historic aerial photograph study of the installation listed “possible solid waste” at this location during an analysis of a 1957 aerial photograph. The EPA (1996) study did not identify stained soils or stressed vegetation in this area in any of the historic aerial photographs.

Previous Studies: A geophysical investigation of Possible Dump Site D – 1957 did not identify any geophysical anomalies at the AOI that were not associated with utilities or buildings (Versar, 2004).

Current Use: Site D – 1957 encompasses Riordan Court and the lawns and driveways associated with four small houses.



Possible Dump Site D - 1957
0 25 50 100
Feet

Current Status: EPA approved NFA for this AOI on 15 June 2011.

Cleanup/Exit Strategy: Not applicable: NFA is required for this AOI.

2.5.7.3 FGGM 95 (OU-45) – POSSIBLE DUMP SITE F – 1957

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

Geophysical Investigation 2004

PA/SI 2010-2014

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid E3, in the western portion of the installation, between Eubanks Loop and Christian Loop.

Site Description: Possible Dump Site F – 1957 was identified as an AOI because the EPA (1996) historic aerial photograph study of the installation listed “possible solid waste” at this AOI during an analysis of a 1957 aerial photograph. In the analysis of the 1963 aerial photograph, EPA stated that “the possible accumulation of solid waste observed in 1957 is no longer present due to construction of new housing.” The EPA (1996) study did not identify stained soils or stressed vegetation in this area in any of the historic aerial photographs.

Previous Studies: A geophysical investigation of Possible Dump Site F – 1957 provided little evidence that the AOI contains metallic or conductive buried waste. There is little geophysical evidence to suggest that this AOI is a former dump or landfill (Versar, 2004).



Possible Dump Site F - 1957
0 25 50 100 Feet

Current Use: The AOI is currently a grass lawn bordered to the north and south by townhouses.

Current Status: EPA approved NFA for this AOI on 15 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.7.4 FGGM 95 (OU-45) – SITE M - PARCEL 1

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study	1996
Geophysical Investigation	2004
EBS	2004
PA/SI	2007
PA/SI	2011

Contaminants of Potential Concern: VOCs, metals, and explosives

Media of Concern: Groundwater

Site Location: Grid F3, in the 8800 Block, east of O'Brien Road.

Site Description: This location was initially identified because a review of a 1938 aerial photograph identified it as a possible dump (EPA, 1996).

Previous Studies: A geophysical investigation (Versar, 2004) confirmed this AOI as a landfill. Over the course of previous investigations at this site, one surface soil sample, 16 subsurface soil samples and one groundwater sample were collected and analyzed. Based on a risk analysis of the analytical results, iron, cobalt, manganese, and arsenic elevate the risk numbers above the site-specific action levels. Methylene chloride was detected above its MCL.

As part of the 2011 SI, three groundwater samples were collected and analyzed for VOCs, metals, and explosives.



Site M - Parcel 1
 0 50 100 200 Feet

Current Use: NSA Construction site

Current Status: Based on the results of the 2011 SI, EPA approved NFA for this AOI on 17 February 2012.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.7.5 FGGM 95 (OU-45) – SITE M - PARCEL 2

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study	1996
EBS	2004
Geophysical Survey	2004
PA/SI	2007
PA/SI	2011

Contaminants of Potential Concern: VOCs, metals, herbicides, pesticides, explosives, PAH, furans, and dioxins

Media of Concern: Soil and groundwater

Site Location: Grid F3, in the 8800 Block, north of the intersection of Zimborski and Taylor Avenues.

Site Description: This location was initially identified because the EPA (1996) historic aerial photograph study suggests there may have been a solid waste landfill at this location in the 1943 aerial photograph.

Previous Studies: Over the course of previous investigations at this site, 13 subsurface soil samples and three groundwater samples (one total and two dissolved) were collected and analyzed. Based on a risk analysis of the analytical results, arsenic, vanadium, manganese, cobalt, and iron elevate the risk numbers above the site-specific action levels. Methylene chloride was detected above its MCL. Fill material containing ash was encountered at 6 of the 10 direct push locations.

As part of the 2011 SI, four surface soil samples were collected and analyzed for VOCs, metals, herbicides, pesticides, explosives, PAH, furans, and dioxins and four subsurface soil samples were collected and analyzed for metals, PAH, furans, and dioxins.



Current Use: NSA Construction site

Current Status: Based on the results of the 2011 SI, EPA approved NFA for this AOI on 17 February 2012.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.7.6 FGGM 95 (OU-45) – SITE M - PARCEL 3

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study.....	1996
SWMU Study	1996
EBS	2004
Geophysical Survey	2004
PA/SI	2007
PA/SI	2010-2012
Environmental Site Assessment.....	2013

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil and groundwater

Site Location: Grid F3, within the golf course complex, west of Zimborski Avenue.

Site Description: Former Building 8880 (SWMU 131/132), constructed in 1949, was a storage area and a pesticide mixing area from 1955 to the late 1970s. It was demolished prior to 2005. Building 8860 (SWMU 133), constructed in 1949, is used for topsoil and chemical storage. The pump house is in the eastern half of the building and contains a well that distributed treated effluent water from the sanitary sewer to the sprinkler system for the former golf course.

Buildings 8870 (SWMU 134) and 8890A (SWMU 136) are used for storage. Building 8890 (SWMU 135) is a mechanic shop and storage area. Building 8891 (SWMU 137) is a storage building/maintenance area. Building 8881 is a storage/maintenance building. Building 21 is a metal storage locker used to store hazardous waste awaiting disposal. There is also a storage shed/rollaway (no building number) north of Building 8890 that is used to store old tires and a lawnmower. Four ASTs and one UST were associated with the maintenance buildings.

Previous Studies: Over the course of previous investigations at this site, 8 surface soil samples, 35 subsurface soil samples, and 10 groundwater samples were collected and analyzed. Based on a risk analysis of the analytical results, arsenic, benzo(a)pyrene, mercury, heptachlor epoxide, and 1,1,2,2-tetrachloroethane elevate the risk numbers above the site-specific action levels.



Current Use: NSA Construction site

Current Status: This AOI received NFA status on 17 February 2012 based on site conditions at that time. EPA approved NFA for this AOI on 25 June 2015.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.7.7 FGGM 95 (OU-45) – SITE M - PARCEL 4

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

EBS 2004

PA 2011

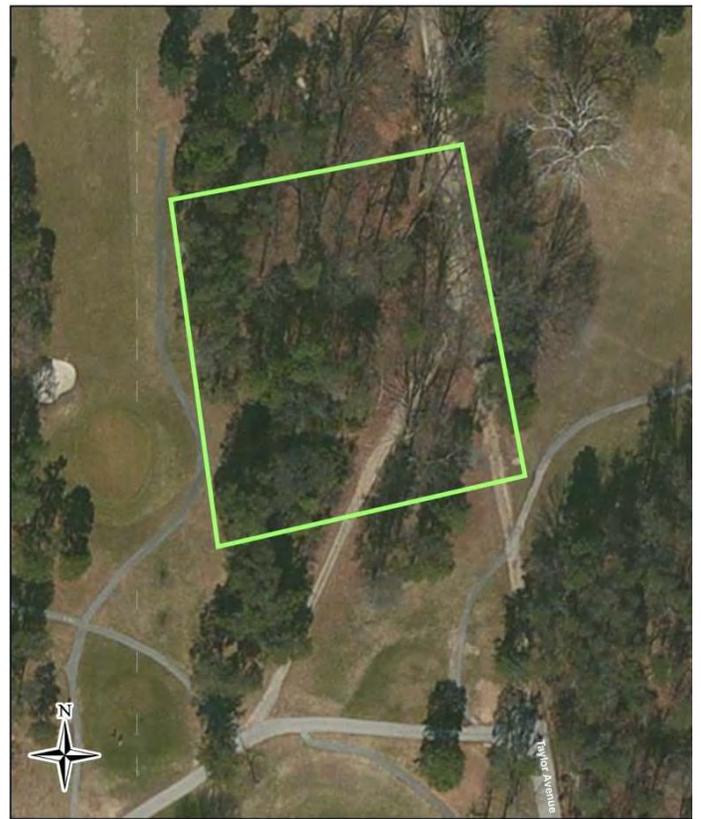
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F3, east and west of Taylor Avenue.

Site Description: This location was initially identified because ground scarring was observed at this AOI during a review of a 1943 historic aerial photograph (Berger EA, 2004). A “disturbance” was observed in the northeastern part of this AOI in the 1952 through 1995 historic aerial photographs (Berger EA, 2004).

Previous Studies: Results: Over the course of previous investigations at this AOI, two subsurface soil samples and one groundwater sample were collected and submitted for laboratory analysis.



Current Use: NSA Construction site

Current Status: EPA approved NFA for this AOI on 7 January 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.7.8 FGGM 95 (OU-45) – SITE M - PARCEL 5

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

EBS 2004

PA 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F3, east of Taylor Avenue.

Site Description: The EBS identified this location because a concrete foundation for an out building and a telephone pole were observed in a wooded area. The foundation was reportedly adjacent to a former farm house and was identified as a “pit” in the EBS. The concrete foundation and telephone pole were observed during the December 2003 Site Investigation that was conducted as part of the EBS. Upon review of the Site Investigation, the concrete foundation is probably from an old out building near a former barn. It was described as “Building 6927 Foundation” in the description of AOI 11. AOI 11 was later renamed Parcel 5.

Previous Studies: Over the course of previous investigations at this site, one subsurface soil sample was collected and analyzed.



Current Use: NSA Construction site

Current Status: EPA approved NFA for this AOI on 7 January 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.7.9 FGGM 95 (OU-45) – SITE M - PARCEL 6

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study	1996
Geophysical Survey	2004
EBS	2004
PA/SI	2007
PA	2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F3/F4, northwest of the intersection of Mapes Road and Cooper Avenue.

Site Description: The EBS identified ground disturbance/ground scar at this location in historic aerial photographs (Berger EA, 2004). The EPA (1996) historic aerial photograph review of the same location did not identify anything they would classify as a disturbance or scarring, in fact, the EPA (1996) report did not identify any AOI at this location. In the sandy coastal plain sediments typical of this location, ground can be easily disturbed by driving over an area with thin vegetation. The Patapsco sands crop out at this location. The Patapsco sands are a white to buff to vari- colored sand that shows up as light spots when exposed on historic aerial photographs. A thin covering of grass covers this location in most of the historic aerial photographs. The ground disturbance/scarring could be from repeated vehicle or foot traffic. Digging, trenching, filling, or any other activity that would suggest landfilling or dumping was not identified for this location.

Previous Studies: Over the course of previous investigations at this site, two subsurface soil samples and one groundwater sample were collected and analyzed.



Site M - Parcel 6
0 70 140 280 Feet

Current Use: Parking lot.

Current Status: EPA approved NFA for this AOI on 7 January 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.7.10 FGGM 95 (OU-45) – SITE M - PARCEL 7

Regulatory Driver: CERCLA

Environmental Investigations:

EBS 2004
PA/SI 2007
PA/SI 2011

Contaminants of Potential Concern: VOCs, SVOCs, metals, pesticides, and explosives

Media of Concern: Groundwater

Site Location: Grid F4, northwest of the intersection of Mapes Road and Taylor Avenue.

Site Description: The 2004 EBS (Berger EA, 2004) suggested that a possible landfill may be located in the northern portion of this site, north of former Parks Golf Course hole 14 and east of the NSA property. This assessment is based on ground scars observed in historic aerial photographs and surficial debris (metal cans, pipes, and a fire hydrant) seen at this location during a 2004 site visit (Berger EA, 2004).

This AOI was also a former Mortar Range. This AOI is the IRP portion of the Mortar Range; the MMRP portion is covered in Section 2.2.1. The foldout map in the pocket of the SMP containing all SMP AOIs shows the overlap of this AOI with the MMRP AOIs.

Previous Studies: Over the course of previous investigations at this site, 40 surface soil samples (and four duplicate surface soil samples), 21 subsurface soil samples, and four groundwater samples (plus one duplicate) were collected and analyzed. Based on a risk analysis of the analytical results, heptachlor epoxide, cobalt, and manganese elevate the risk numbers above the site-specific action levels. Methylene chloride was detected above its MCL.

As part of the 2011 SI, two groundwater samples were collected and analyzed for VOCs, SVOCs, pesticides, and explosives. No compounds exceeded risk levels.



Site M - Parcel 7
0 200 400 800 Feet

Current Use: Vacant land / NSA Construction site

Current Status: Based on the results of the 2011 SI, EPA approved NFA for this AOI on 17 February 2012.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.7.11 FGGM 95 (OU-45) – SITE M - PARCEL 8

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study.....1996
EBS.....2004
PA/SI.....2007
PA/SI.....2010-2014
Focused Enhanced Site
Investigation (FESI)..... 9/2012 to 11/2012
FESI Final Report.....5/2013

Contaminants of Potential Concern: Metals

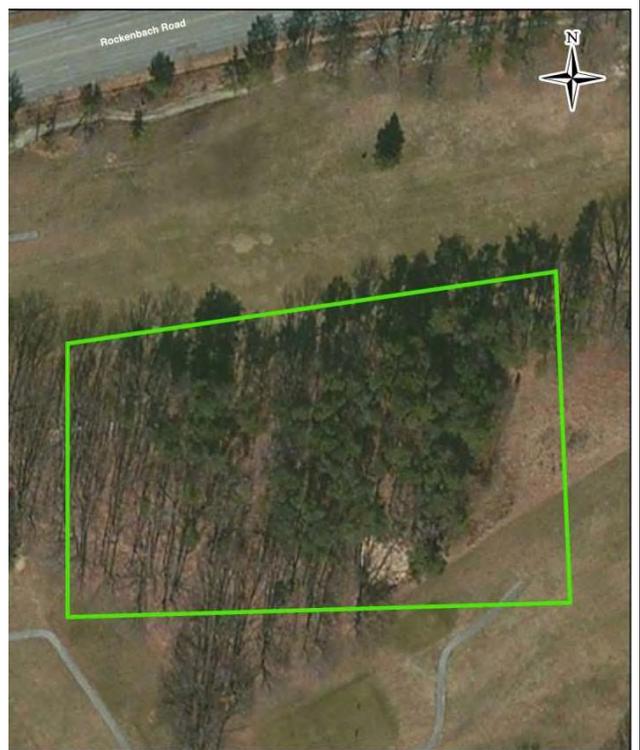
Media of Concern: Soil and groundwater

Site Location: Grid F3, in the 8800 Block, 500 feet southeast of the intersection of Rockenbach and 29th Division Roads.

Site Description: This location was identified in the EBS as a possible dump site during a review of a 1938 aerial photograph (Berger EA, 2004).

Previous Studies: Over the course of previous investigations at this AOI, one surface soil sample, six subsurface soil samples, and two groundwater samples (one total metals and one dissolved metals) were collected and analyzed. Based on a risk analysis of the analytical results, antimony, arsenic, cobalt, nickel, and iron elevate the risk numbers above the site-specific action levels. Lead was detected above its MCL.

An EPA-approved soil removal effort was conducted.



Site M - Parcel 8
0 40 80 160
Feet

Current Use: NSA Construction site

Current Status: Based on the closure report for Site M Parcel 8, EPA approved NFA for this AOI on 16 December 2013.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.7.12 FGGM 95 (OU-45) – SITE M - PARCEL 9

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996
EBS 2004
PA/SI 2007
PA 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F3, northwest of the intersection of Cooper Avenue and Reece Road.

Site Description: Disturbed ground was identified at this location in a 1938 historic aerial photograph, and ground scarring/disturbance was identified here in a 1943 aerial (Berger EA, 2004). Ground scarring/disturbance, stressed vegetation, or staining was not identified at this location in the EPA (1996) historic aerial photograph study of the installation.

Previous Studies: A geophysical investigation (Berger EA, 2004) was conducted to inspect the disturbed ground and ground scarring. The geophysical investigations of this area revealed some anomalies.

As part of the EBS for this site, four subsurface soil samples and two groundwater samples were collected and analyzed for the anomalies that could not be attributed to utilities or the cart path.



Site M - Parcel 9
0 75 150 300
Feet

Current Use: Office building

Current Status: EPA approved NFA for this AOI on 7 January 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.7.13 FGGM 95 (OU-45) – TAYLOR AVENUE BURIED DRUM SITE

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996
 Geophysical Survey 2007
 SI 2007
 PA 2011

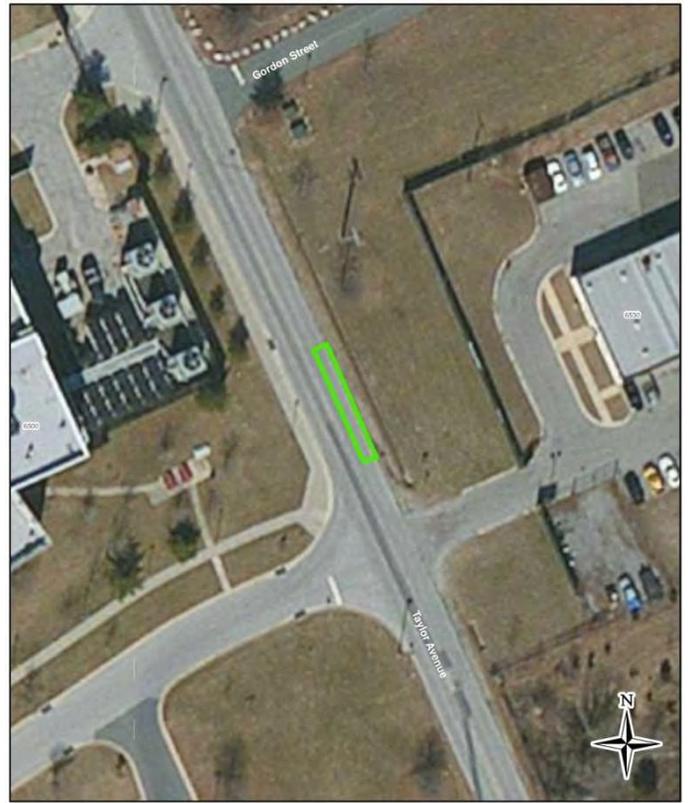
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F4, in the south-central portion of the installation, approximately 150 feet south of the intersection of Taylor Avenue and Gordon Street.

Site Description: The Taylor Avenue Buried Drum site was identified as an AOI on 24 February 2006, when, while mapping a gas line for Baltimore Gas & Electric, Soft Dig crews discovered a buried drum along Taylor Avenue. The drum was located between Building 6500, the Defense Information School, and Building 6530, the Auto Craft Shop. The AOI is confined to the eastern edge of Taylor Avenue.

Previous Studies: Over the course of previous investigations at this AOI, one drum composite sample and three post-excavation subsurface soil samples were collected and submitted for laboratory analysis.



Buried Drum Site - Taylor Avenue
 0 25 50 100 Feet

Current Use: Roadways and grass fields

Current Status: EPA approved NFA for this AOI on 5 October 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8 FGGM 96 (OU-46) – FORMER MOTOR POOLS, WRS, AND BUILDINGS

2.5.8.1 FGGM 96 (OU-46) – DPW ENTOMOLOGY DEPARTMENT, FORMER MP, BUILDING 294

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
Historic Aerial Photograph Study	1996
SI	1999
Data Gap Investigation	2002
PA	2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H4, on the eastern portion of the installation, in the southeast corner of the intersection of 4th Street and Chamberlin Avenue. Building 294 is located in the northwest corner of MP-7/WR-6. MP-7/WR-6 is being addressed separately.

Site Description: Building 294 was identified as a potential past SWMU in the 1996 SWMU study (BCM, 1996) because it was formerly used as a MP. Building 294 is used for administrative purposes and houses the Department of Public Works Entomology Department, where pesticides are stored and mixed. Pesticides, herbicides, fungicides, and rodenticides are stored inside; an outdoor concrete slab is used for mixing chemicals. The AOI is also identified as a “vehicle service and staging area” in historic aerial photographs dated 1943 through 1988, and as a “former vehicle service and staging area” in a 1995 historic aerial photograph (EPA, 1996).

Previous Studies: Over the course of previous investigations at this AOI, 6 surface soil samples and 11 subsurface soil samples were collected and submitted for laboratory analysis.



Building 294 - Entomology Department
0 25 50 100 Feet

Current Use: Administrative

Current Status: EPA approved NFA for this AOI on 20 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.2 FGGM 96 (OU-46) – ASSOCIATED WR AND OWS, BUILDING 1251

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study..... 1996
 Sampling Visits..... 1999 and 2001
 SI 2001
 PA..... 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid G1, in the northern portion of the installation, in the southeast quadrant of the intersection of 26th Street and Annapolis Road.

Site Description: Building 1251 was identified as SWMU 19 because a portion of the building is used for vehicle maintenance (BCM, 1996). The adjacent WR (SWMU 21) and OWS (SWMU 20) were identified as SWMUs because of systematic wash water discharge into the OWS from the WR (BCM, 1996).

The maintenance shop in the building uses and stores small quantities of lube oil, waste oil, brake fluid, and antifreeze. Four former storage sheds, two near Building 1251 and two on the east side of Building 1252, were used to store hazardous materials and petroleum products; the sheds were removed in the late 1990s.

Previous Studies: Over the course of previous investigations at this AOI, four surface soil samples and 16 subsurface soil samples (plus one duplicate subsurface soil sample) were collected and analyzed.



Building 1251 - Administrative and Vehicle and Equipment Storage, Wash Rack



Current Use: Administrative functions and storage of military vehicles and equipment; a portion of the building is used for minor vehicle maintenance

Current Status: EPA approved NFA for this AOI on 15 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.3 FGGM 96 (OU-46) – VEHICLE MAINTENANCE, BUILDING 2121

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996
 Sampling Visits 1999
 PA 2011

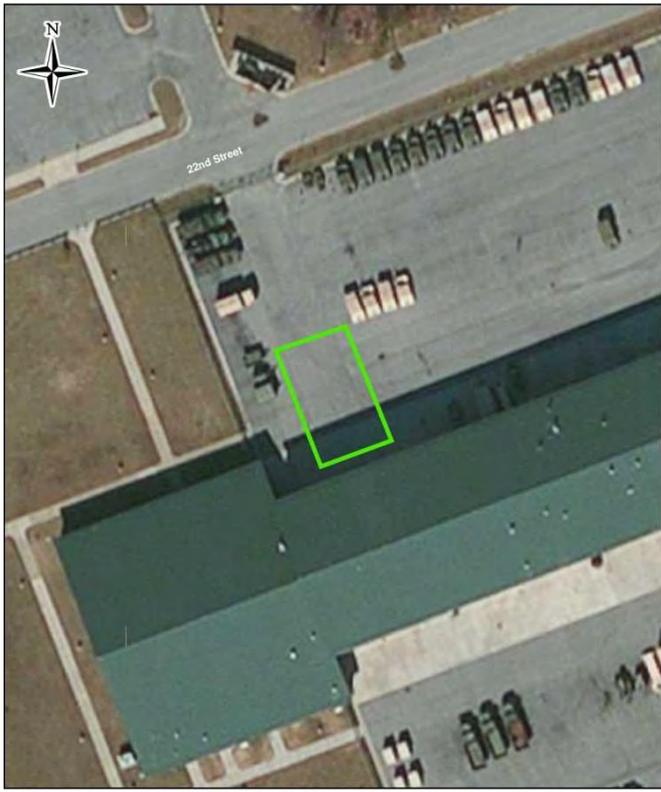
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H2, Former Building 2121 was located in the northeastern portion of the installation, at the southeast quadrant of the intersection of Annapolis Road and 21½ Street.

Site Description: Building 2121 (SWMUs 29 and 30) was constructed in 1941. It was identified as two SWMU facilities in the 1996 SWMU study (BCM, 1996) because of its past operation as a vehicle and small engine maintenance repair facility (SWMU 30) and its more recent use for equipment maintenance and repair (SWMU 29). There were no spills or reported releases identified by BCM during the SWMU study (BCM, 1996). At the time of the 1998 sampling activities (Versar, 1999), vehicles and equipment were parked in the yard, and limited quantities of antifreeze, gasoline, diesel fuel, and motor oil were stored on the AOI. The building was demolished in early 1999, shortly after the 1998 sampling activities.

Previous Studies: Over the course of previous investigations at this AOI, 6 surface and 13 subsurface soil samples were collected and submitted for laboratory analysis.



Building 2121 - Vehicle Maintenance
 0 25 50 100 Feet

Current Use: Parking lot

Current Status: EPA approved NFA for this AOI on 15 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.4 FGGM 96 (OU-46) – MAINTENANCE FACILITY, FORMER BUILDING 2122

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996
 Historic Aerial Photograph Study..... 1996
 Sampling Visits..... 1999
 PA..... 2011

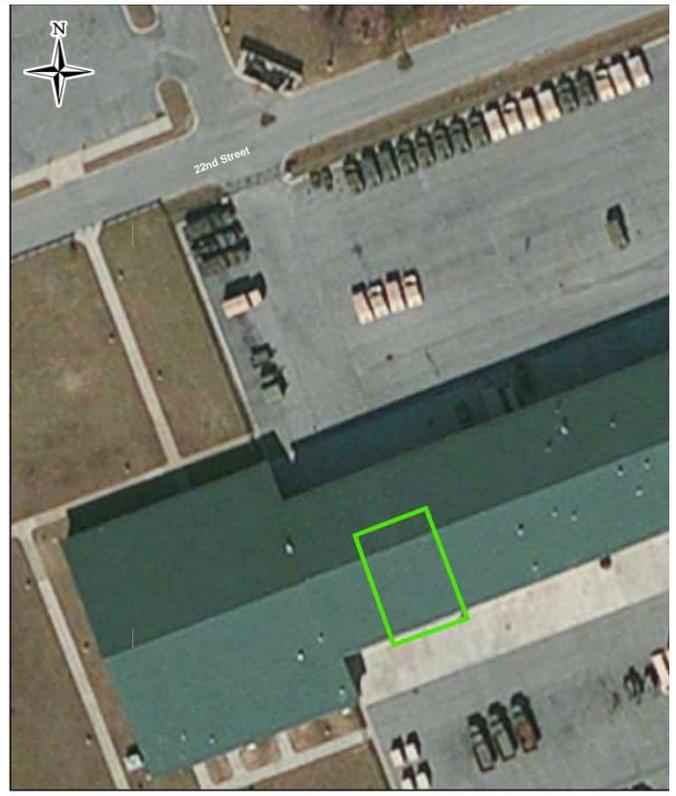
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H2, in the northeast portion of the installation, in the southeast quadrant of the intersection of 21½ Street and Annapolis Road.

Site Description: Building 2122 was identified as SWMU 31 during the 1996 SWMU study (BCM, 1996) because of its past use as a vehicle maintenance facility. There were no spills or reported releases identified during the SWMU study (BCM, 1996). Former Building 2122 was used as a vehicle maintenance facility from its construction in 1941 until 1975, for camouflage painting from 1975 to 1978, and for storing miscellaneous military supplies (tents and small motors) from 1978 until its demolition in early 1999.

Previous Studies: Over the course of previous investigations at this site, four subsurface soil samples were collected and submitted for laboratory analysis.



Building 2122 - Vehicle Maintenance
 0 25 50 100 Feet

Current Use: Administrative

Current Status: EPA approved NFA for this AOI on 15 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.5 FGGM 96 (OU-46) – MAINTENANCE FACILITY, FORMER BUILDING 2123

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study..... 1996

Sampling Visits..... 1999

PA..... 2011

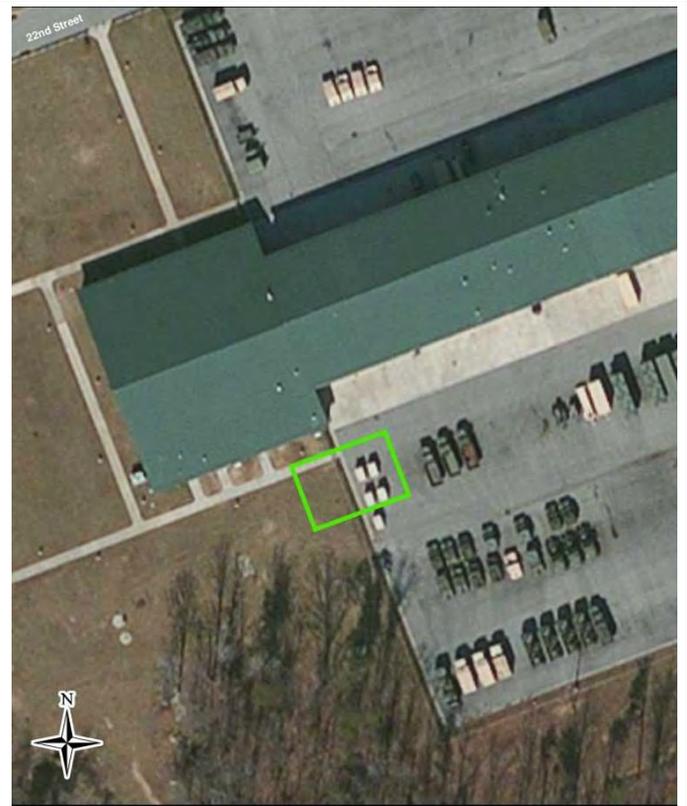
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H2, in the northeast portion of the installation, in the southeast quadrant of the intersection of 21½ Street and Annapolis Road.

Site Description: Former Building 2123 was constructed in 1941. It was used as a vehicle maintenance facility in the 1970s, and for equipment storage since that time until it was removed, sometime between 2001 and 2003.

Previous Studies: Over the course of previous investigations at this site, four subsurface soil samples were collected and submitted for laboratory analysis.



Building 2123 - Tent/Jeep Storage
0 30 60 120 Feet

Current Use: Parking lot and grassy area
Current Status: EPA approved NFA for this AOI on 15 June 2011.
Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.6 FGGM 96 (OU-46) – MAINTENANCE FACILITY, BUILDING 2124

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996
 Sampling Visits 1999
 PA 2011

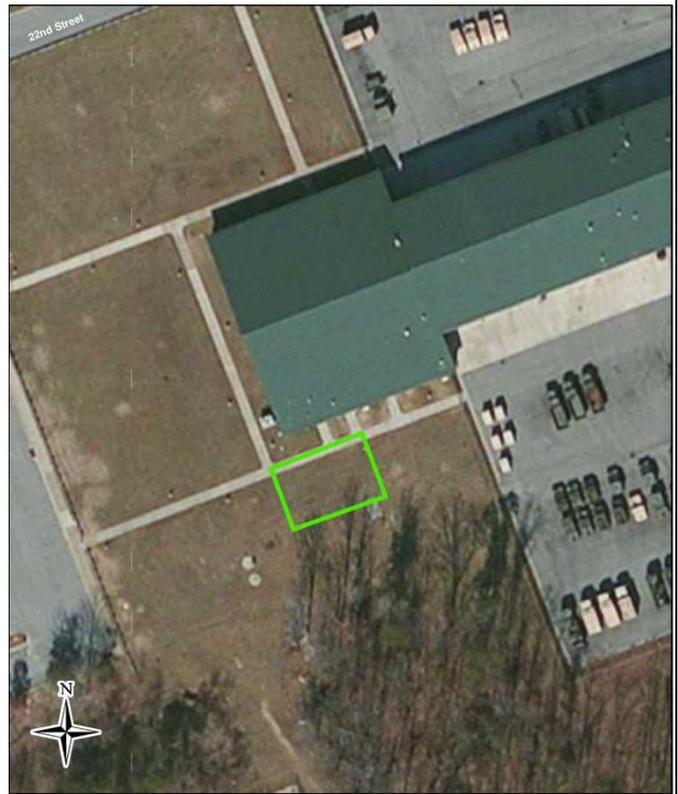
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H2, in the northeast portion of the installation, approximately 800 feet southeast of the intersection of 21½ Street and Annapolis Road.

Site Description: Building 2124 was constructed in 1941 and identified as two SWMUs during the 1996 SWMU study (BCM, 1996) because it was used as a vehicle and tool storage area (SWMU 33) and because routine waste from the building may have been contained and discarded on site during the building’s former use as a vehicle maintenance facility (SWMU 34). There were no spills or reported releases identified during the SWMU study (BCM, 1996). It is unknown when the building was removed.

Previous Studies: Over the course of previous investigations at this AOI, four subsurface soil samples (and one duplicate subsurface soil sample) were collected and submitted for laboratory analysis.



Building 2124 - Vehicle and Tool Storage, Vehicle Maintenance



Current Use: Trees and grass

Current Status: EPA approved NFA for this AOI on 15 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.7 FGGM 96 (OU-46) – MEDICAL SUPPLY/ADMINISTRATION, BUILDING 2484

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996
 Sampling Visit 2000
 PA 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H4, in the southeastern portion of the installation, approximately 250 feet northwest of the intersection of Ernie Pyle and 4th Streets.

Site Description: Building 2484 served as a warehouse for receiving and storing hospital supplies. The building stored unopened containers of chemicals, including cleansers, acetone, methanol, ammonia, alcohol pads, and developers and fixers for the hospital's X-ray machine. In the past, products were stored in a flammable room in the building. These chemicals are reportedly no longer stored in this building.

Previous Studies: Over the course of previous investigations at this site, four subsurface soil samples and one groundwater sample were collected and submitted for laboratory analysis.



Building 2484 -- Hospital Chemical Facility
 0 25 50 100 Feet

Current Use: Administrative

Current Status: EPA approved NFA for this AOI on 20 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.8 FGGM 96 (OU-46) – DENTAL RESEARCH LABORATORY, FORMER BUILDING 2802

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....	1996
Historic Aerial Photograph Study.....	1996
Sampling Visit	2001
PA	2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H3, in the eastern portion of the installation, approximately 1,200 feet north of the intersection of Mapes Road and Chisholm Avenue.

Site Description: Former Building 2802 was constructed in 1941 and used as a dental research laboratory for approximately 10 years starting in the early 1970s. The dental research laboratory used radioactive materials until it was decommissioned. Radioactive waste was removed by the Forest Glen health physics office, and the radioactive materials license was relinquished in 1994. The building was used in the mid-1990s for administrative purposes and storing laboratory equipment, and it was demolished by early 2000.

Previous Studies: Over the course of previous investigations at this site, four subsurface soil samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.



Building 2802 - Dental Research Lab
 0 25 50 100
 Feet

Current Use: Grassy field

Current Status: EPA approved NFA for this AOI on 18 April 2012.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.9 FGGM 96 (OU-46) – CHEMICAL STORAGE AND ELECTRON MICROSCOPY LAB, FORMER BUILDING 2804

<p>Regulatory Driver: CERCLA</p> <p>Environmental Investigations:</p> <p>SWMU Study 1996</p> <p>Sampling Visit 2000</p> <p>Data Gap Investigation 2002</p> <p>PA 2012</p> <p>Contaminants of Potential Concern: None identified</p> <p>Media of Concern: None identified</p> <p>Site Location: Grid H3, in the eastern portion of the installation, north of the intersection of Ernie Pyle and 13th Streets.</p> <p>Site Description: Building 2804 was identified as a potential former SWMU because it was formerly used as an electron microscopy laboratory. The building was used as barracks before it became a laboratory (BCM, 1996). Chemicals were stored in flammable cabinets, storage shelves, and in a chemical waste cabinet. Chemicals on the shelves included potassium permanganate, buffer solutions, hydrochloric acid, and uranium acetate (uranyl acetate). The amount of uranium acetate stored and used at this AOI would have been minimal.</p> <p>Previous Studies: Over the course of previous investigations at this AOI, three surface soil samples, ten subsurface soil samples, and three groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.</p>	 <p style="text-align: center;">Building 2804 - Chemical Storage, Electron Microscopy Lab</p> <p style="text-align: center;">0 25 50 100 Feet</p>
	<p>Current Use: Grass field</p> <p>Current Status: EPA approved NFA for this AOI on 18 April 2012.</p> <p>Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.</p>

2.5.8.10 FGGM 96 (OU-46) – LAB/CHEMICAL STORAGE/OFFICERS’ MESS HALL, FORMER BUILDING 2805

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
Sampling Visit	2000
Data Gap Investigation	2002
PA	2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H3, in the eastern portion of the installation, southeast of the intersection of Ernie Pyle and 13th Streets.

Site Description: Building 2805 was identified as a potential past SWMU in the 1996 SWMU study (BCM, 1996) because it was formerly used as a high-performance liquid chromatography lab and microencapsulation lab since the 1970s, and exactly how waste was managed in the past is unknown. There were no spills or reported releases identified during the SWMU study (BCM, 1996).

Building 2805 stored chemicals, including lithium bromide, magnesium sulfate, potassium phosphate, heptane, acetonitrile, dextran, polyvinyl alcohol, and buffer solution. Prior to being used as a laboratory, the building was used as barracks. Building 2805 was demolished in the late 1990s.

Previous Studies: Over the course of previous investigations at this site, 7 direct-push borings were advanced around Building 2805; three surface soil samples, 13 subsurface soil samples, and one groundwater sample were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.



Building 2805 - Laboratory/Chemical Storage



Current Use: Grassy field

Current Status: EPA approved NFA for this AOI on 18 April 2012.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.11 FGGM 96 (OU-46) – DENTAL CLINIC, FORMER BUILDING 2831

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
Historic Aerial Photograph Study	1996
Environmental Impact Statement (EIS)	1997
Sampling Visit	2000
PA	2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H3, in the eastern portion of the installation, approximately 1,500 feet north of the intersection of Mapes Road and Chisholm Avenue.

Site Description: Former Building 2831(SWMUs 96 and 97) was constructed in 1941 for administrative purposes. It was also used for dentistry training and as a dental clinic, an x-ray processing lab, and chemical storage. There were two silver recovery units inside the building. Wastewater from the silver recovery units was flushed down the sanitary sewer, where it was treated at a wastewater treatment plant. The building was demolished in 1999.

Previous Studies: Over the course of previous investigations at this site, six direct-push borings were completed adjacent to Former Building 2831, and six subsurface soil samples were collected and submitted for laboratory analysis.



Building 2831 - Dentistry Training and Clinic, X-Ray Processing Lab, and Chemical Storage

0 25 50 100 Feet

Current Use: Vacant, grass-covered lot

Current Status: EPA approved NFA for this AOI on 20 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.12 FGGM 96 (OU-46) – ADMINISTRATIVE, BUILDING 4552

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study..... 1996

SWMU Study..... 1996

PA..... 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid G4, in the southeastern portion of the installation, northwest of the intersection of Llewellyn and Cooper Avenues.

Site Description: Building 4552 – administrative and 1940 barracks (Non-SWMU 10), was not identified as a SWMU in the 1996 SWMU study (BCM, 1996) because no routine waste was stored or produced here. Current and past use of Building 4552 consisted of support facilities, primarily administrative, for intelligence agencies. It typically stored cleaners (floor wax, strippers, and detergents) and office supplies. There are no reports of pesticides being stored at this building.

Previous Studies: Building 4552 was investigated as part of the SWMU study and included in the SWMU report (BCM, 1996). BCM indicated there were no spills or reported releases in the building or the area surrounding this building during the SWMU study (BCM, 1996).



Building 4552 - Non-SWMU 10
0 25 50 100 Feet

Current Use: Administrative

Current Status: EPA approved NFA for this AOI on 20 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.13 FGGM 96 (OU-46) – PHOTO LAB, BUILDING 4554

Regulatory Driver: CERCLA

Environmental Investigations:

EIS.....	1977
SWMU Study.....	1996
Sampling Visit.....	2000
PA.....	2011

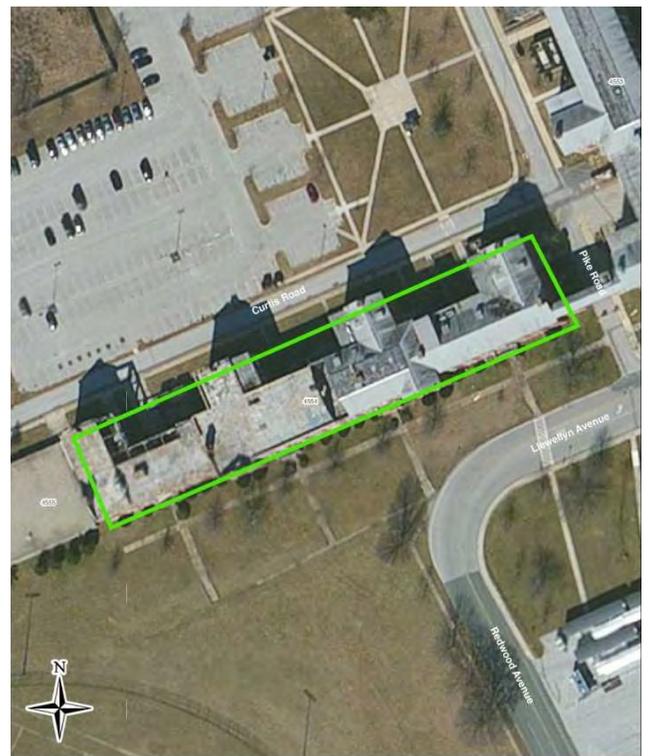
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid G4, in the southern portion of the installation near the intersection of Llewellyn and Cooper Avenues.

Site Description: Building 4554 was used as a support facility for the intelligence agencies; it consists of a photo lab, electronics fabrication, and administrative functions. Typical maintenance chemicals such as cleaners, floor waxes, strippers, and detergents were stored in the building. The photo lab contained a silver recovery system for the developer and fixer, and after recovery the developers and process chemicals were flushed into the sanitary sewer system, where it was treated by a wastewater treatment plant. These operations reportedly no longer occur at this facility.

Previous Studies: Over the course of previous investigations at this AOI, eight direct-push borings were advanced around Building 4554, and eight subsurface soil samples were collected and submitted for laboratory analysis.



Building 4554 - Support Facility for Intelligence Agencies



Current Use: Administrative

Current Status: EPA approved NFA for this AOI on 15 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.14 FGGM 96 (OU-46) – WR SYSTEM FOR MOST RECENT GOLF COURSE CLUB HOUSE, BUILDING 6800

<p>Regulatory Driver: CERCLA</p> <p>Environmental Investigations:</p> <p>SWMU Study 1996</p> <p>Historic Aerial Photograph Study 1996</p> <p>Sampling Visits 1998-1999</p> <p>Data Gap 2002</p> <p>PA 2011</p> <p>Contaminants of Potential Concern: None identified</p> <p>Media of Concern: None identified</p> <p>Site Location: Grid F3, east of Taylor Avenue.</p> <p>Site Description: The SWMU study (BCM, 1996) identified an OWS (SWMU 139) and WR (SWMU 140) adjacent to and northeast of Building 6865, the former clubhouse, which was located east of Taylor Avenue. The SWMU Sampling Visit and Data Gap studies involved collecting samples east of Building 6800, the site of the most recent Golf Course Club House. The WR associated with the most recent Golf Course Club House (Building 6800) off Taylor Avenue is used for rinsing and washing golf carts and golf course maintenance equipment. Building 6800 was constructed in 1993. The former Golf Course Club House, Building 6865, was located directly south of Building 6800, and is addressed as a separate site.</p> <p>Previous Studies: Over the course of previous investigations at this AOI, three surface soil samples and six subsurface soil samples were collected and submitted for laboratory analysis.</p>	 <p style="text-align: center;">Building 6800 - WR System for Most Recent Golf Course Club House</p> <p style="text-align: center;">0 25 50 100 Feet</p>
	<p>Current Use: Vacant building</p> <p>Current Status: EPA approved NFA for this AOI on 7 January 2011.</p> <p>Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.</p>

2.5.8.15 FGGM 96 (OU-46) – WR SYSTEM FOR FORMER GOLF COURSE CLUB HOUSE, BUILDING 6865

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study..... 1996
 Historic Aerial Photograph Study..... 1996
 PA/SI..... 2011

Contaminants of Potential Concern: VOCs, SVOCs, metals, herbicides, and pesticides

Media of Concern: Soil and groundwater

Site Location: Grid F3, east of Taylor Avenue.

Site Description: The SWMU study (BCM, 1996) identified an OWS (SWMU 139) and WR (SWMU 140) adjacent to and northeast of Building 6865, the former clubhouse. Building 6865 was located east of Taylor Avenue. The site of former Building 6865 is currently a parking lot. The SWMU Sampling Visit and Data Gap studies collected samples east of Building 6800, the site of the most recent Golf Course Club House. The WR associated with the former Golf Course Club House (Building 6865) was not investigated. The former Golf Course Club House, Building 6865, was located directly south of Building 6800, and is addressed as a separate site.

Previous Studies: As part of the 2011 SI, two surface soil samples, three subsurface soil samples, and one groundwater sample was collected and analyzed for VOCs, SVOCs, metals, herbicides, and pesticides.



Building 6865 - WR System for Former Golf Course Club House



Current Use: Parking lot

Current Status: Based on the results of the 2011 SI, EPA approved NFA for this AOI on 17 February 2012.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.16 FGGM 96 (OU-46) – DENTAL CLINIC, BUILDING 8472

Regulatory Driver: CERCLA

Environmental Investigations:

Draft EIS.....	1977
SWMU Study.....	1996
Sampling Visit.....	2000
PA.....	2011

Contaminants of Potential Concern: None identified

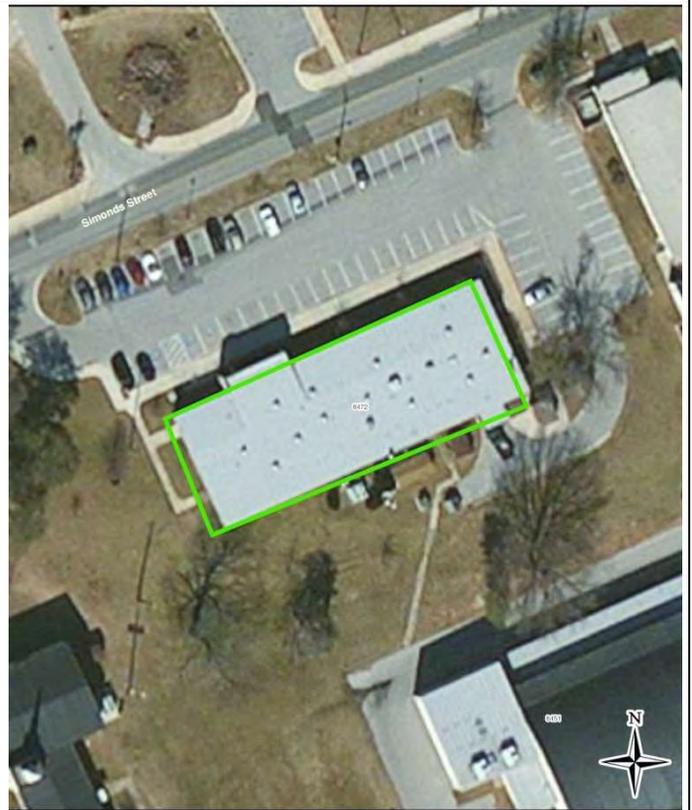
Media of Concern: None identified

Site Location: Grid F4, in the southern portion of the installation on Simonds Road between Zimborski Avenue and 6th Armored Calvary Road.

Site Description: Building 8472 was constructed in the early 1960s and replaced a building constructed in the mid-1950s. Building 8472 was used as a dental clinic, and it contained a silver recovery system. After recovery, developers and process chemicals were flushed into the sanitary sewer system. Chemicals not in active use were stored in a locked room in several flammable materials cabinets and on storage shelves.

These activities reportedly stopped.

Previous Studies: Over the course of previous investigations at this AOI, four subsurface soil samples were collected and submitted for laboratory analysis.



Building 8472 - Dental Clinic
 0 25 50 100
 Feet

Current Use: Administrative

Current Status: EPA approved NFA for this AOI on 15 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.17 FGGM 96 (OU-46) – VEHICLE MAINTENANCE, BUILDING 8487

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996
RFA 3rd Phase 1999
PA 2011

Contaminants of Potential Concern: TPH, VOCs, and SVOCs

Media of Concern: Soil and groundwater

Site Location: Grid F5, in the southwest portion of the installation, southwest of the intersection of O'Brien Road and Simonds Street.

Site Description: Building 8487 (SWMUs 119 and 120) was used as a motor pool for conducting maintenance checks on military vehicles, including oil changes. This AOI also contains five sheds west of Building 8487 that used to store paints, oils, antifreeze, and waste oil. Building 8487 stores acetylene and argon for welding.

Previous Studies: Over the course of previous investigations at this site, two surface soil samples and eight subsurface soil samples were collected from eight different borings around Building 8487. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.



Building 8487 - Motor Pool
0 25 50 100
Feet

Current Use: Administrative

Current Status: EPA approved NFA for this AOI on 5 October 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.18 FGGM 96 (OU-46) – ADMINISTRATIVE, BARRACKS, AND CLINIC, BUILDINGS 2454, 2455, 2456, AND 2457

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

PA 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H4, in the southeastern portion of the installation, in the northeast quadrant of the intersection of Wilson and 4½ Streets.

Site Description: Former Building 2454 was used for administration since its construction in the early 1940s and was demolished in 1999/2000.

Former Building 2455 was used as barracks beginning in the early 1940s and later served as the Dental Headquarters administration.

Former Building 2456 served as the Community Counseling Center for social drug rehabilitation.

Former Building 2457 served as the eye clinic and administrative offices of Optometry Services, and they stored/used alcohol preps, acetone, office supplies, and household cleaners.

Previous Studies: No soil or groundwater samples have been collected at this AOI. The 1996 SWMU study did not identify these AOIs as SWMUs, and it recommended NFA. The Fort Meade Environmental Partnership approved this AOI for NFA in 1999. There are no recent or historical indications of releases or contamination at these AOIs (BCM, 1996). There is no evidence of scarring, staining, or disturbance in any of the historic aerial photographs (EPA, 1996).



Former Buildings 2454, 2455, 2456, and 2457

0 40 80 160 Feet

Current Use: Buildings.

Current Status: EPA approved NFA for this AOI on 20 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.19 FGGM 96 (OU-46) – STOREHOUSE, BUILDING 2801

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study..... 1996
 Historic Aerial Photograph Study..... 1996
 PA 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H3, in the eastern portion of the installation, in the northwest corner of the intersection of Chisholm Avenue and 13th Street.

Site Description: Former Building 2801 was constructed in the early 1940s. Prior to 1985, the building was used as a warehouse to store lab equipment for the Corps of Engineers. More recently it was used as a research/administrative facility that utilized computers, video equipment, and robotics. Chemicals stored inside the building included small amounts of oils for the lathe and dry Polaroid films for photographic supplies. Chemicals were generally used entirely, and if any waste was produced, it was moved to Building 2832. Building 2801 was demolished in 1999 or 2000.

Building 2801 was not identified as a SWMU in the 1996 SWMU study (BCM, 1996). The SWMU study recommended NFA for this AOI (BCM, 1996). There are no recent or historical indications of releases or contamination at this AOI. There is no evidence of scarring, staining, or disturbance in any of the historic aerial photographs (EPA, 1996).

Previous Studies: No soil or groundwater samples have been collected at this AOI.



Current Use: Grass field

Current Status: EPA approved NFA for this AOI on 20 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.20 FGGM 96 (OU-46) – BARRACKS AND ADMINISTRATIVE, BUILDINGS 9802 AND 9803

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996
 Historic Aerial Photograph Study 1996
 PA 2011

Contaminants of Potential Concern: Not determined

Media of Concern: Not determined

Site Location: Grid E3, in the western portion of the installation, southeast of the intersection of Canine Road and Cochrane Lane.

Site Description: Buildings 9802 (non-SWMU 12) and 9803 (non-SWMU 13) have been used for troop housing since their construction in the mid-1950s. No chemicals are used or stored in these buildings except typical cleaners, and no routine waste is generated, discharged, or stored in these buildings. Buildings 9802 and 9803 were not identified as SWMUs in the 1996 SWMU study because there was no storage of waste material or systematic waste discharges. However, they were investigated as part of the SWMU study and included in the SWMU (1996) report.

Previous Studies: Over the course of previous investigations at this site, personnel knowledgeable about the buildings were interviewed and historic aerial photographs were reviewed. In both cases, no evidence of a release of hazardous substances resulting in contamination to soil, groundwater, or surface water was found. There is no evidence of scarring, staining, or disturbance in any of the historic aerial photographs (EPA, 1996).



Buildings 9802 and 9803 -- Troop Housing
 0 50 100 200 Feet

Current Use: Barracks and administrative

Current Status: EPA approved NFA for this AOI on 15 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.21 FGGM 96 (OU-46) – PRIVATELY OWNED VEHICLES WR

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996
 Historic Aerial Photograph Study 1996
 RFA 3rd Phase 1999
 PA 2011

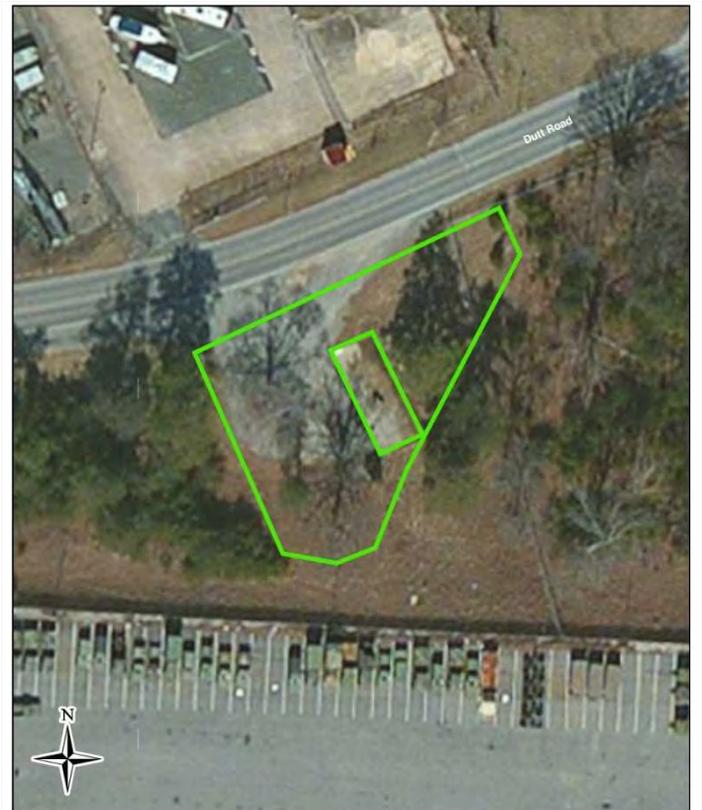
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F5, SWMUs 141 and 142 are located in the southern portion of the installation, southeast of Dutt Road.

Site Description: The WR system located southeast of Dutt Road is not associated with any building. The system was identified as two SWMUs during a 1996 SWMU study because it routinely discharged wash water from the WR (SWMU 142) to the OWS (SWMU 141) (BCM, 1996). The WR was in use during the 1999 RFA for washing privately owned vehicles. Its construction date is unknown, but buildings occupied the AOI from the early 1940s through the 1960s. This AOI was not identified in the EPA (1996) review of historic aerial photographs of the installation; no stains, stressed vegetation, standing liquid, or other environmental concerns were identified at this location.

Previous Studies: Over the course of previous investigations at this AOI, six subsurface soil samples were collected and analyzed.



SWMUs 141 and 142 - Privately Owned Vehicles Wash Rack



Current Use: Grass and trees

Current Status: EPA approved NFA for this AOI on 15 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.22 FGGM 96 (OU-46) – FORMER OWS AND WR

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
Historic Aerial Photograph Study	1996
RFA 3 rd Phase	1999
SI	2001
PA	2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H4, in the southeastern portion of the installation, northwest of the intersection of 4th and Y Streets.

Site Description: SWMUs 143 and 144 were identified as two SWMUs because the WR (SWMU 144) discharged to the OWS (SWMU 143), and then to the sanitary sewer system when washing military vehicles and equipment. The area was converted to a family campground at the end of 2001. The construction date is unknown for the WR system. It consisted of a concrete-lined WR and associated OWS, and was demolished and removed in 1999.

Previous Studies: No spills or reported releases were identified during the SWMU study (BCM, 1996).

Over the course of previous investigations at this AOI, six surface soil samples (plus one duplicate sample), five subsurface soil samples, and two groundwater samples (plus one duplicate sample) were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.



SWMUs 143 and 144 - Wash Rack and Oil/Water Separator



Current Use: Roadways and grassy areas

Current Status: EPA approved NFA for this AOI on 20 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.5.8.23 FGGM 96 (OU-46) – OIL TANKS

Regulatory Driver: CERCLA

Environmental Investigations:

Historic Aerial Photograph Study 1996

PA 2011

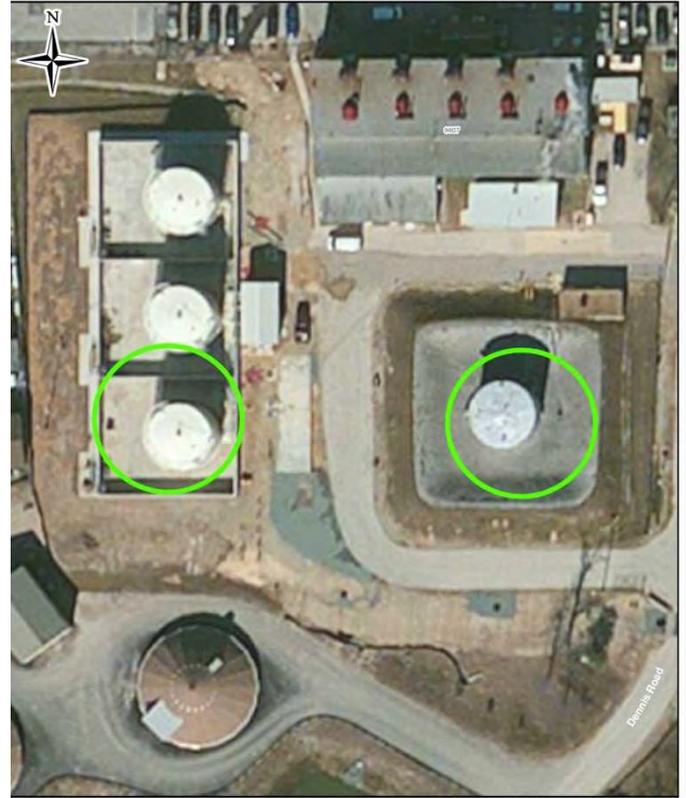
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid E3/E4, in the western portion of the installation, west of Dennis Road, south of Emory Road, and south of Building 9807.

Site Description: Two oil tanks and a heating plant are located at this AOI. The oil tanks probably held heating oil for the adjacent heating plant and did not hold any hazardous material. It is unknown why these oil tanks are considered an AOI. This location was not identified as an AOI during the 1996 SWMU study (BCM, 1996) or the EPA (1996) historic aerial photograph study of the installation. The EPA (1996) study did not identify stained soils, stressed vegetation, standing liquid, or other environmental concerns in this area in any of the historic aerial photographs.

Previous Studies: No previous sampling has been undertaken.



Oil Tanks
0 25 50 100
Feet

Current Use: Oil tanks

Current Status: EPA approved NFA for this AOI on 15 June 2011.

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.6 MILITARY MUNITIONS RESPONSE PROGRAM AOIS DESIGNATED FOR NFA

2.6.1 FGGM 004-R-01 (OU-41) – GRENADE AND BAYONET RANGE A

Regulatory Driver: CERCLA

Environmental Investigations:

PA 2002-2003

Historical Records Review 2006

SI 2007

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F5, in the southwestern portion of the installation, bounded to the west by Grant Road, to the north by Building 8478, to the east by Building 8452, and to the south by Dutt Road.

Site Description: This AOI comprises the former Grenade and Bayonet Range A, which is believed to have been used from 1924 until the late 1930s. It is assumed that hand grenades were used on site and could have included fragmentation and practice hand grenades. Most of the 16-acre range has been developed and is currently occupied with various buildings and associated parking lots. The buildings currently located on the MRS were constructed by 1954. They include Buildings 8474, 8452, 8451, 8465, and 8479. Parking lots and driveways surround these buildings.

Previous Studies: Over the course of previous investigations at this site five soil samples were collected as part of the SI and submitted for laboratory analysis. None of the five soil samples had metal detections above the regulatory limits, and no explosives were detected. There is no physical evidence of MEC or munitions debris on the MRS.



FGGM-004-R-01 - Grenade & Bayonet Range A

0 100 200 400
Feet

Current Use: Administrative and recreational
Current Status: No further MMRP action was required based on the findings of the 2007 SI. EPA approved NFA on 13 June 2007.
Cleanup/Exit Strategy: Not applicable; NFA.

2.6.2 FGGM 008-R (OU-44) – GRENADE AND BAYONET RANGE B

Regulatory Driver: CERCLA

Environmental Investigations:

PA 2002-2003

Historical Records Review 2006

SI 2007

Contaminants of Potential Concern: None identified

Media of Concern: None identified

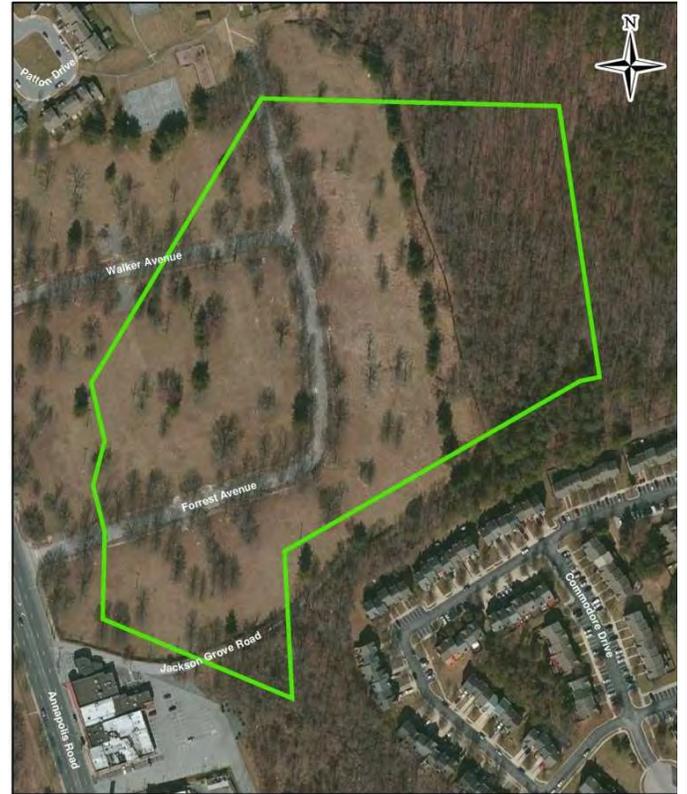
Site Location: Grid H3, in the northeastern portion of the installation.

Site Description: This AOI consists of the former Grenade and Bayonet Range B, which is believed to have been used in 1943. It is assumed that hand grenades were used on site and could have included fragmentation and practice hand grenades.

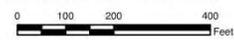
No MEC or munitions debris was observed over this 19-acre parcel during a magnetometer-assisted site walk, and no further MMRP action was recommended in the SI (Malcolm Pirnie, 2007b).

Previous Studies: Over the course of previous investigations at this site five soil samples were collected as part of the SI and submitted for metals and explosives laboratory analysis.

Except for arsenic, no metals were detected above the regulatory limits, and no explosives were detected. There is no physical evidence of MEC or munitions debris on the MRS.



FGGM-008-R-01 - Grenade & Bayonet Range B



Current Use: Vacant land

Current Status: No further MMRP action was required based on the findings of the 2007 SI. EPA approved NFA on 13 June 2007.

Cleanup/Exit Strategy: Not applicable; NFA.

2.6.3 FGGM 005-R-01 (OU-42) – PISTOL RANGE A

Regulatory Driver: CERCLA

Environmental Investigations:

PA 2002-2003

Historical Records Review 2006

SI 2007

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H3, on the east side of Fort Meade. The 4-acre site is located south of Reece Road and directly west of Route 175. Chisholm Avenue runs north/south through the former range.

Site Description: This AOI used to have several structures on site, including buildings 2821–2826 and 899. The range was identified on a 1924 War Game Map issued by the War Department for Camp Meade. Based on the operation dates of other ranges found on the War Game Map, it is assumed that the pistol range was used from 1924 until the early 1940s. It is also assumed that only small arms were used on site, but there is no specific information regarding this.

Information on the frequency of use and types of munitions used was unavailable, but .45-cal ammunition is assumed to have been used because it was the most common pistol ammunition in the 1920s. There is no information on any MEC responses conducted on site.

Previous Studies: Over the course of previous investigations at this site, five composite surface soil samples were collected as part of the SI and submitted for lead analysis. Lead was detected in soil samples taken at this site at levels below regulatory limits (Malcolm Pirnie, 2007b).



FGGM-005-R-01 - Pistol Range A
0 40 80 160 Feet

Current Use: All structures have been demolished. The undeveloped area is flat with grass vegetation and a few scattered trees and shrubs.

Current Status: No further MMRP action was required based on the findings of the 2007 SI. EPA approved NFA on 13 June 2007.

Cleanup/Exit Strategy: Not applicable; NFA.

2.6.4 FGGM 006-R-01 (OU-43) – PISTOL RANGE B

Regulatory Driver: CERCLA

Environmental Investigations:

PA 2002-2003

Historical Records Review 2006

SI 2007

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid E4, in the southwestern portion of the installation, bounded to the west by Brown Road and Building 9705, to the north by Building 9841 and parking lots, to the east by undeveloped property, and to the south by parking lots and undeveloped property. O'Brien Road runs through the middle of the site.

Site Description: The range was identified on a 1924 War Game Map issued by the War Department for Camp Meade. Based on the operation dates of other ranges found on the War Game Map, it is assumed that the pistol range was used from 1924 until the early 1940s. It is also assumed that only small arms were used on site, but there is no specific information regarding this. Information on the frequency of use and types of munitions used was unavailable, but .45-cal ammunition is assumed to have been used because it was the most common pistol ammunition in the 1920s. There is no information on any MEC responses conducted on site.

East of O'Brien Road, the AOI is undeveloped with a walking/jogging trail traversing the site. West of O'Brien Road, the range is within what is now NSA property and is mostly developed with buildings and parking areas. The undeveloped area is forested with heavy shrub growth in some areas.

Previous Studies: Over the course of previous investigations at this site five composite surface soil samples were collected as part of the SI and submitted for lead analysis. Lead was detected in soil samples taken at this site at levels below regulatory limits (Malcolm Pirnie, 2007b).



FGGM-005-R-01 - Pistol Range B
0 250 500 1,000 1,500 2,000
Feet

Current Use: This AOI is within NSA property and is mostly developed with buildings and parking areas.

Current Status: No further MMRP action was required based on the findings of the 2007 SI. EPA approved NFA on 13 June 2007.

Cleanup/Exit Strategy: Not applicable; NFA.

2.7 BASE REALIGNMENT AND CLOSURE AOIs DESIGNATED FOR NFA

2.7.1 FGGM 21 (OU-16) – MEDICAL WASTE SITE

Regulatory Driver: CERCLA

Environmental Investigations:

SI..... 1994

Removal Action Report..... 1999

PA..... 2012

Contaminants of Potential Concern: Arsenic

Media of Concern: Soil

Site Location: Grid A7, at the Walter Reed Medical Center farm in the BRAC parcel off Switch Board Road, adjoining and east of the Baltimore-Washington Parkway, approximately 2 miles southwest of State Route 198. The Medical Waste site is approximately 1 acre.

Site Description: The former farm property was transferred from Fort Meade to the U.S. Department of the Interior under the BRAC program in 1991 and is currently part of the PRR-NT. Prior to the transfer, the property was operated as an animal farm from about 1967 to 1987. A medical/farming waste area was located near the southwest corner of the former farm, about 750 feet southwest of a retention pond and adjacent to a marshy area extending south to the Patuxent River. The facility was never a secure facility and was not a site where biological agents would have been used in research (FGGM, 1999). Based on the history of the AOI, biological agents would not have been used in research at this location, and likewise, would not be disposed of in the Medical Waste site. A scan of both the general work area and specific medical waste debris with a Radiation Survey Meter reported no elevated radiological readings.

Previous Studies: Over the course of previous investigations at this AOI, 12 surface soil samples were collected and submitted for laboratory analysis.



FGGM 21 - Medical Waste Site
0 250 500 1,000 Feet

Current Use: Inactive

Current Status: On 23 February 2012, EPA concurred that analytical results indicate that no CERCLA release has occurred at this AOI. This AOI is closed with respect to CERCLA. Any risk associated with munitions will be addressed under the MMRP and the LUCRD for the HEI Area (FGGM 002-R-01).

Cleanup/Exit Strategy: Not applicable; NFA is required for this AOI.

2.7.2 FGGM 32 (OU-18) – FIRE TRAINING AREA (PART OF TIPTON)

Regulatory Driver: CERCLA

Environmental Investigations:

Enhanced PA.....	1989
SI.....	1992
Ordnance and Explosives	
Removal Action	1997
RI.....	1998
Removal Action Report	1998
LTMP.....	2001, 2012
LTM.....	2004-2014
5-Year Reviews	2005, 2011
ESD.....	2014
LUCRD.....	October 2015
5-Year Review.....	2016

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid E5, in the northern portion of Tipton Army Airfield, off Airfield Road, north of the airfield and east of the Helicopter Hangar Area.

Site Description: The FTA was constructed around 1979 by the Fort Meade Fire Department for training purposes. The northern half of the FTA is fenced off and previously enclosed the fire training pit and adjacent training areas. Fires were typically set inside the pit or in portable burn pans using gasoline or aviation fuel. The fires were then extinguished with water or aqueous foam, a synthetic extinguishing agent. Other emergency response training, such as self-contained breathing apparatus training and emergency rescues, were performed at this location. An OWS located on the south side of the fire training pit was used when draining the pit. Water from the separator was transported from the site via an underground pipeline to a sanitary sewer. Both the fire training pit and OWS were removed in 1998.

Previous Studies: The TAP OU ROD presents the final remedy for soils as NFA. The TAP Final ESD was submitted in May 2014.



Current Use: Inactive

Current Status: Conducting 5-year reviews to evaluate the frequency and need for continued LTGM; the last 5-year review was conducted in 2011. Any risk associated with munitions will be addressed under the MMRP and the TAP LUCRD (FGGM 85) that was submitted in June 2015 to better implement, maintain, and enforce the MEC LUCs.

Cleanup/Exit Strategy: FGGM 32 will be administratively closed because groundwater is currently being monitored under FGGMs 10 and 31 for all of Tipton and MEC is addressed under FGGM 85.

2.7.3 FGGM 72 (OU-27) – POL STORAGE TANKS

Regulatory Driver: CERCLA

Environmental Investigations:

Investigation, CAP, and Initial Site

Characterization 1989

Soil Gas Survey 1992

PA 2012

LUCRD June 2015

Contaminants of Potential Concern: Heating oil

Media of Concern: Soil and groundwater

Site Location: Grid F5, in the northern portion of the TAP.

Site Description: FGGM 72 consists of Building/Hangar 80 and Building/Hangar 85, which are both located along Airfield Service Road. A steel 4,000-gallon heating oil tank is located at Building 80, and a steel 5,000-gallon heating oil tank is located at Building 85 (Argonne, 1989). The 4,000-gallon UST at Building 80 was installed in June 1988. This tank replaced a steel-constructed, 4,000-gallon UST that failed a leak test in May 1988 and was removed by order of MDE. Contaminated soils excavated during the tank removal were disposed of at the sanitary landfill. The MDE case was closed on 21 June 1988 (EA, 1992b). The present UST is on the north side of Building 80 and is surrounded by three monitoring wells.

The 5,000-gallon UST at Building 85 was installed in November 1975 (EA, 1992b). The tank passed a leak test in May 1988.

These USTs stored heating oil for use in the adjacent buildings 80 and 85, respectively. This was confirmed in the 1991 transfer assembly document and the 1998 de-registration report.

Previous Studies: Over the course of previous investigations at this site, 26 soil vapor samples were obtained.



FGGM 72 (OU-27) - POL Storage Tanks, P-080 and P-085

0 100 200 400 Feet

Current Use: The Army has transferred this property, and MDE records indicate the USTs were closed in 1998.

Current Status: EPA approved NFA for this AOI on 23 February 2012. Any risk associated with munitions will be addressed under the MMRP and the TAP LUCRD (FGGM 85) that was submitted in June 2015 to better implement, maintain, and enforce the MEC LUCs and incorporate them into the CERCLA process.

Cleanup/Exit Strategy: Not applicable. The Army plans to administratively close AEDB-R number "FGGM 72" because EPA has approved NFA and MEC is addressed under FGGM 85.

2.7.4 FGGM 73 (OU-28) – MAINTENANCE SHOPS, BUILDINGS 85 AND 90

Regulatory Driver: CERCLA

Environmental Investigations:

PA 1990
 SI 1992
 PA 2011
 LUCRD June 2015

Contaminants of Potential Concern: Not determined

Media of Concern: Not determined

Site Location: Grid E5, in the north-central portion of the Tipton Airfield.

Site Description: This AOI is for the USTs at Buildings 85 and 90. The 5,000-gallon UST at Building 85 was installed in November 1975. The tank passed a leak test in May 1988.

Building 90 was constructed in the early 1980s and used for the maintenance and storage of helicopters. In addition to fuels such as aviation and diesel fuel, hydraulic and lubricating oils, detergents, and solvents were also used, handled, or stored. Hangar 90 was cleared and taken out of service when it was decommissioned in early 1996.

Maintenance Shop Building 85 is also part of FGGM 72 – POL Storage Tanks because Building 85 includes USTs at. Maintenance Shop Building 90 is also part of FGGM 80 – Helicopter Hangar 90 because Building 90 is the Helicopter Hangar building.

Previous Studies: Over the course of previous investigations at these AOIs, 12 soil vapor samples were obtained around the UST at Building 85. Low-level hydrocarbon contamination (e.g., maximum encountered toluene concentration was 1.6 parts per million) was detected at 4 of the 12 vapor sampling locations (EA, 1992).



FGGM 73 (OU-28) - Maintenance Shops, Buildings 85 and 90

0 300 600 1,200 Feet

Current Use: Part of Tipton Airfield Parcel

Current Status: The PA includes a letter saying the Army will administratively close AEDB-R number "FGGM 73." Any risk associated with munitions will be addressed under the MMRP and the TAP LUCRD (FGGM 85) that was submitted in June 2015 to better implement, maintain, and enforce the MEC LUCs and incorporate them into the CERCLA process.

Cleanup/Exit Strategy: FGGM 73 will be administratively closed because this AOI is addressed under FGGM 72, FGGM 80, and FGGM 85.

2.7.5 FGGM 80 (OU-32) – HELICOPTER HANGAR 90 (PART OF TIPTON)

Regulatory Driver: CERCLA

Environmental Investigations:

PA	1989
SI	1992
RI	1998
Removal Action Report	1999
LTMP	2001, 2012
LTM	2004-2014
ESD	2014
LUCRD	June 2015
5-Year Review	2016

Contaminants of Potential Concern: Metals, fuels, and oils.

Media of Concern: Soil and groundwater

Site Location: Grid E5, in the northwest corner of the Tipton Army Airfield, and includes Building 90 (the Helicopter Hangar) and adjacent areas.

Site Description: HHA Building 90 and associated structures were constructed in the early 1980s. Hangar 90 was used to store and maintain helicopters. Typical activities included washing, disassembly, repair, and painting of aircraft. Aviation and diesel fuel, hydraulic and lubricating oils, detergents, and solvents were used, handled, or stored here. Hangar 90 was cleared and taken out of service when it was decommissioned in early 1996.

Previous Studies: Previous studies and reports that included the BRAC parcels were: an Enhanced PA (1989), a study by the Maryland Department of Natural Resources, a Draft SI Addendum (which included an Environmental Impact Statement (EIS) and a Wetland Identification Study) (1991), an SI (1992), an RI (1998), an Ordnance and Explosives Removal Action (1997), and a Removal Action Report (1999).



FGGM 80 - Helicopter Hangar 90
0 30 60 120 Feet

Current Use: Part of Tipton Airfield Parcel

Current Status: Conducting 5-year reviews to evaluate the frequency and need for continued LTGM; the last one was conducted in 2011. This ensures the remedy continues to provide adequate protection of human health and the environment. Any risk associated with munitions will be addressed under the MMRP and the TAP LUCRD (FGGM 85) that was submitted in June 2015 to better implement, maintain, and enforce the MEC LUCs and incorporate them into the CERCLA process.

Cleanup/Exit Strategy: FGGM 80 will be administratively closed because 1) the ROD presents the final remedy for soils as NFA, 2) groundwater is currently being monitored under FGGM 10 and FGGM 31 for all of Tipton Airfield Parcel, and 3) MEC is addressed under FGGM 85.

2.7.6 FGGM 82 (OU-34) – UNEXPLODED ORDNANCE (UXO) REMOVAL

Regulatory Driver: CERCLA

Environmental Investigations:

Enhanced PA	1989
PA	1990
Ordnance Survey and Removals	1992, 1993
RA(C)	1997
Engineering Evaluation	2001
NTCRA Memorandum	2001
LTM	2001
NTCRAs	2003-2004
OE Removal Action	2006
5-Year Review Report	2008

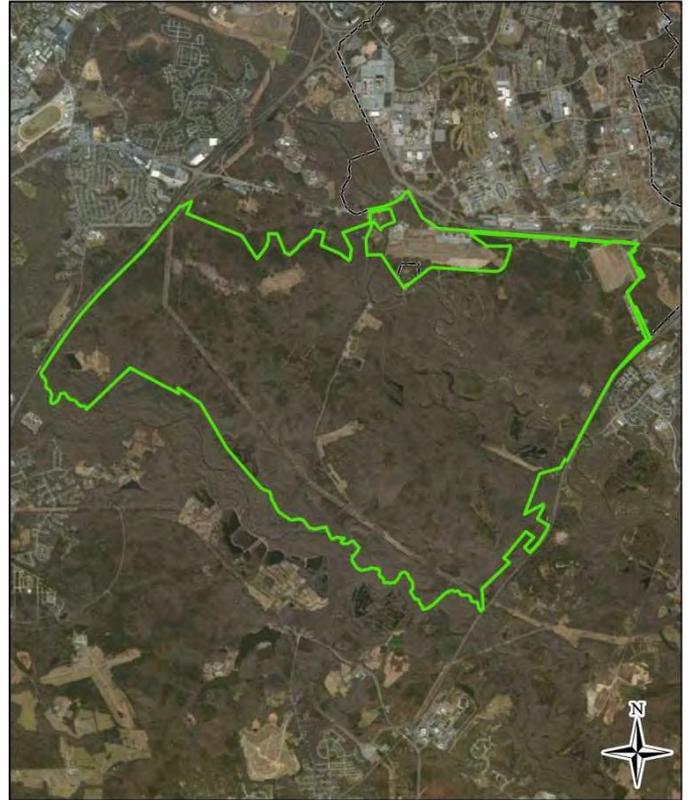
Contaminants of Potential Concern: MEC

Media of Concern: Soil

Site Location: Grids A5 through F10, FGGM 82 covers the entire PRR-NT.

Site Description: FGGM 82 is the Installation Restoration Program (IRP) designation for UXO removal in the PRR-NT. FGGM 002-R-01 is the MMRP designation for MEC work at the PRR-NT.

Previous Studies: Several sweeps of the PRR-NT occurred in the past, and in 2001, an Action Memorandum recommended LUCs with surface and subsurface clearance to depth in selected areas. A NTCRA was completed for 24 areas within the PRR-NT identified by the USFWS as high traffic areas. LUCs include educating workers and recreational users on potential residual OE hazards that may be associated with the property and proper notification procedures if any OE is encountered.



FGGM 82 (OU-34) – Unexploded Ordnance Removal
0 2,500 5,000 10,000 Feet

Current Use: Patuxent Research Refuge.

Current Status: The PA includes a letter saying the Army will administratively close AEDB-R number "FGGM 82."

Cleanup/Exit Strategy: Funding for work on the PRR-NT was moved from the IRP to the MMRP, and FGGM 82 is recommended for administrative closure. Future work will fall under the designation High Explosive Impact and Disposal Area FGGM 002-R-01. Continuing site work (including MEC issues and LUCs) will still be addressed under FGGM 002-R-01 after FGGM 82 is administratively closed.

2.7.7 6-ACRE LITTLE PATUXENT RIVER SITE

Regulatory Driver: CERCLA

Environmental Investigations:

Environmental Condition of

Property Final.....2011

Contaminants of Potential Concern: None

Media of Concern: None

Site Location: Grids G8 and H8, adjacent to the southeast corner of the PRR-NT, separated by railroad tracks.

Site Description: This AOI is undeveloped land. The Patuxent Road traverses the site. There is no indication that the site has ever been used as an operational range, and considering its location it probably has not.

Previous Studies: There has been no sampling by previous studies.

Current Use: Inactive.

Current Status: A Final Environmental Condition of Property was completed in FY11 and approved by regulatory agencies. A Record of Environmental Consideration, Finding of Suitability for Transfer, and Disposal Report was completed in FY14. The Army submitted a quitclaim deed that transferred the property to Anne Arundel County in 2015 under a conservation conveyance.



6-acre Little Patuxent River Site
0 100 200 400
Feet

Cleanup/Exit Strategy: NFA is recommended for this AOI.

3. SITE MANAGEMENT SCHEDULES

This section describes the proposed future work and schedules for the FGGM AOIs that require further action. Schedules depicting the major project activities for each AOI are provided. These schedules are tentative, based on funding allocation, completion of removal actions, and government comments received for the reports. The work actions and schedules will be updated on a yearly basis.

3.1 SITE MANAGEMENT PLAN SCHEDULES

The SMP schedules were developed as generic guidelines for duration of tasks. The durations are generic because the level of effort for an AOI is unknown until it is further investigated. Where site-specific schedules were available, the durations are not generic.

As discussed in Section 2, some FGGM AOIs are ongoing, and some AOIs are newly identified where little, if any, work has been conducted. The generic SMP schedule durations shown in Tables 3-1 and 3-2 are representative of the phase of work being performed at the time this document was written.

3.2 SITE MANAGEMENT PLAN SCHEDULES

Table 3-1 on the following pages includes detailed project schedules for open AOIs at Fort Meade. Additionally, Table 3-2 is a list of the PA/SI AOIs grouped by geographic areas, to assist the reader in determining the correct schedule for a specific PA/SI AOI. Milestones (due dates) for some AOIs presented in Table 3-1 of this document have changed from the milestones presented in the Final 2014 SMP.

Whenever “EPA reviews” appears in the project schedules, it means review by EPA and appropriate signatories of the Fort Meade FFA. What constitutes “appropriate” is determined by ownership and/or proximity to the AOI, e.g., the USAOC will review all documents pertaining to the USAOC Campus (concurrent with the EPA), and determine whether there are known or suspected impacts to the USAOC Campus from an adjacent cleanup site, e.g., OU-4 or OU-5 (DRMO site). These AOI reviews will also be done concurrent with EPA’s review. Neither AOI is owned by USAOC, but both AOIs have contaminated groundwater that has been observed on the USAOC Campus. The CSL, OU-12, is very close to the Campus; however, the AOI is hydraulically down- and cross-gradient from the USAOC Campus. With no data to suggest the CSL can affect the USAOC Campus, the Army would not provide documents about the CSL to USAOC unless specifically requested by USAOC.

Table 3-2: PA/SI AOI Summary by Geographic Area

North

Building 940 – MP WR, and OWS (SWMUs 12, 13, 146)
Building 1007 – Army Reserves MP, Vehicle Maintenance, Motor Repair Shop, OWS, and WR
Building 2120c – Vehicle Storage and Maintenance, WR, and OWS (SWMUs 25-28)
Former Building 2128– Vehicle Maintenance MP-16/WR-11 (SWMUs 35, 36)
Building 2804 (SWMU 94)
Building 2805 (SWMU 95)
Building 3000 (SWMU 98)
Former Incinerator Building – 1943 (21½ Street)
MP-13/WR-9
MP-14
MP-17
MP-18/WR-12 MP-19/WR-13
Former Incinerator Site – Reece Road
Possible Dump Site A – 1957 – Former Compliance Cleanup Site
Possible Dump Site B – 1957
Possible Dump Site E – 1957
Possible Dump Sites – 1970
Small Pit – 1952

Golf Course

Site M Parcel 3
Site M Parcel 8

South of 32

Building 73 - Gas Training Building
Ammunition Supply Point No. 2
Possible Dump Site G – 1957

Southeast

Building 546 (SWMU 11)
Buildings 2227 and 2234 (SWMUs 43, 44, 147)
Building 2480 - (SWMU 71)
Building 2482 – (SWMU 73)
Building 2490 (SWMU 74)
Building 2501 (SWMUs 75, 76)
Building 2630 (SWMUs 77, 78, 79)
Building 2724 (SWMUs 80-86)

Southeast Continued

Building 2728 (SWMUs 87- 92, 148)
Building 2802 (SWMU 93)
Buildings 2810, 2811, 2832 (non-SWMUs 6, 7, 8)
Building 4272 (non-SWMU 9)
Building 4411 (SWMU 99)
Former MP-2
Former MP-6
Former MP-7/WR-6
FormerMP-8
Former MP-9
Former MP-10
Former MP-11/WR-7
Former MP-12/WR-8
Possible Vehicle Service Area A – 1943
Possible Vehicle Service Area B – 1943
6th Street and Chisholm Ave.
Stained Soils along 3rd Street
Waste Storage/Disposal Area – 1938

Southwest

Building 4587 (SWMUs 101, 102)
Building 4680 (SWMU 103)
Building 6513 (SWMU 150)
Former Building 6522 (SWMU 151, 152)
Building 6530 (SWMUs 105-108)
Building 8480 (SWMUS 110, 111)
Building 8485 (SWMUS 115, 116, 116A)
Building 8486 (SWMUs 117 and 118)
Buildings 8549, 8550, and 8551 (SWMUs 121-128, 149)
Building 9581 (SWMU 138)
Advanced Wastewater Treatment Plant
Former MP-1/WR-4
Former MP-3/WR-2
Former MP-4
Former MP-5
Former WR-3
IAL4
Fill – 1988

Appendix A
EPA's Acceptance of 2009 SMP
and Amended SMPs for 2010, 2011, 2012, , 2013, 2014, and 2015

Appendix B Response to Comments

