Final
Amended Site Management Plan

Fort George G. Meade, Maryland

September 2011

Contract Number: W912DR-09-D-0017
Delivery Order Number: 0016

Prepared for:

US Army Corps of Engineers ®
Baltimore District

10 South Howard Street
Baltimore, MD 21201

Prepared by:

URS

URS Group, Inc.
12420 Milestone Center Drive, Suite 150
Germantown, MD 20876
Project no. 15302066

DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON
4551 LLEWELLYN AVENUE, Suite 5000
FORT GEORGE G. MEADE, MARYLAND 20755-5000

REPLY TO
ATTENTION OF:

SEP 27 2011

Mr. John Burchette
NPL/BRAC/Federal Facilities Branch
U.S. Environmental Protection Agency
1650 Arch Street
Philadelphia, PA 19103-2029

Re: Final Amended 2011 Site Management Plan, Fort George G. Meade
Docket Number: CERC-03-2009-0207FF

Dear Mr. Burchette:

In accordance with Sections XI (Deadlines and Contents of Site Management Plan) and XII (Budget Development and Amendment of Site Management Plan) of the October 6, 2009 Comprehensive Environmental Response, Compensation, and Liability Act § 120 Federal Facility Agreement (FFA) for Fort George G. Meade, please find enclosed for your review two copies of the September 2011 *Final Amended 2011 Site Management Plan.*

Copies of this letter have been forwarded to the following individuals Michael P. Butler-Fort George G. Meade, Environmental Division, Walter Chahanovich-Fort George G. Meade, Office of the Staff Judge Advocate, Steve Cardon-Fort Meade Legacy, Base Realignment and Closure Office, Sherry Deskins-Architect of the Capitol, Laurie Haines and Susan Ryan-US, Army Environmental Command, Brad Knudsen-Department of Interior, Fish and Wildlife Service, Emily Schiffmacher-Baltimore District-Corps of Engineers, Elisabeth Green-Maryland Department of the Environment, Jerry Kashatus and Sarah Gettier-URS Corp.

Should you have any questions, please feel free to contact me at (301) 677-9365 or Mr. Markus Craig at (703) 545-2474.

Sincerely,

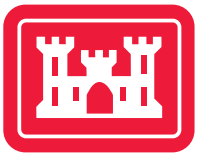
Paul V. Fluck, PG, REP
Installation Restoration Program Manager
Directorate of Public Works-Environmental Division

Markus A. Craig
Fort Meade BRAC Program Manager
Office of the Assistant Chief of Staff for Installation Management, Base Realignment and Closure Division

Enclosures

FINAL

SITE MANAGEMENT PLAN
2011 ANNUAL UPDATE
FORT GEORGE G. MEADE, MD



Prepared for
U.S. Army Corps of Engineers
Baltimore District
10 South Howard Street
Baltimore, MD 21201

September 2011

URS

URS Group, Inc.
12420 Milestone Center Drive, Suite 150
Germantown, MD 20876
Project no. 15302269

Table of Contents

1.0 Introduction 1-1
1.1 Overview of the Site Management Plan 1-1
1.2 Objectives of the Site Management Plan 1-1
1.3 Site Management Plan Updates 1-2
1.4 Installation Description 1-2
1.4.1 Installation Location and Geomorphology 1-2
1.4.2 Installation History 1-2
1.5 National Priorities Listing 1-3
1.6 Information Repositories 1-3
2.0 Site Descriptions by Source Funding 2-1
2.1 Installation Restoration Program Open Sites 2-1
2.1.1 FGGM 03 (OU-6) – Water Treatment Plant, Building 8688 (SWMUs 129 and 130) 2-1
2.1.2 FGGM 07 (OU-5) – DRMO Drum Site 2-2
2.1.3 FGGM 08 (OU-7) – Comp Ammunition Supply Point No. 1 2-3
2.1.4 FGGM 11 (OU-9) – Gas Training Building 73 2-4
2.1.5 FGGM 13 (OU-10) – Former Pesticide Shop, Building 6621 2-5
2.1.6 FGGM 14 – Building 6527 Control Hazardous Substance Storage Facility 2-6
2.1.7 FGGM 17 (OU-12) – Closed Sanitary Landfill 2-7
2.1.8 FGGM 18 (OU-13) – Ammunition Supply Point No. 2 2-8
2.1.9 FGGM 19 (OU-14) – Advanced Waste Water Treatment Facility 2-9
2.1.10 FGGM 31 (OU-17) – Tipton Inactive Landfill 2 2-10
2.1.11 FGGM 33 (OU-19) – Battery Shop, Building 2283 2-11
2.1.12 FGGM 36 (OU-20) – Photographic Laboratory, Building 6530 2-12
2.1.13 FGGM 37 (OU-21) – Kimbrough Army Hospital Building 2480 2-13
2.1.14 FGGM 45 (OU-22) – Calibration Laboratory, Building 2220 2-14
2.1.15 OU-4 Southeast Groundwater 2-15
2.1.15.1 FGGM 47 (OU-4) – Post Laundry Facility, Building 2250 2-16
2.1.15.2 FGGM 86 – Former Motor Pool Maintenance Facility 2-17
2.1.15.3 FGGM 88 – Former Tank Maintenance Facility Shop-1 2-18
2.1.15.4 FGGM 89 – Former Tank Maintenance Facility Shop-2 2-19
2.1.15.5 FGGM 90 – Former Tank Cleaning Supply Warehouse 2-20
2.1.15.6 FGGM 91 – Former Missile Repair Shop 2-21
2.1.15.7 FGGM 92 – Former Heavy Gun Cleaning and Repair Shop 2-22
2.1.15.8 FGGM 49 (OU-23) – DOL, Buildings 2286 and 2246 2-23
2.1.15.9 Monitoring Wells 125d and 126d 2-24
2.1.16 FGGM 51 (OU-24) – Building 2217 (spill site) 2-25
2.1.17 FGGM 70 (OU-25) – Indoor Range, Building 6513 (SWMU 150) 2-26

2.1.18 FGGM 71 (OU-26) – EX Indoor Shooting Range, Building 6522 2-27
2.1.19 FGGM 74 (OU-29) – Architect of the Capitol 2-28
2.1.20 FGGM 75 (OU-30) – Underground Storage Tanks Prior to 1984 2-29
2.1.21 FGGM 83 (OU-1) – Former Trap and Skeet Range 2-30
2.1.22 FGGM 87 (OU-3) – Former Nike Control Site 2-31
2.1.23 FGGM 93 (OU-36) – Manor View Dump 2-32
2.1.24 FGGM 95 (OU-45) – Former Landfill Sites 2-33
2.1.24.1 Possible Dump Site A – 1957 2-33
2.1.24.2 Possible Dump Site B – 1957 2-34
2.1.24.3 Site 1957E 2-35
2.1.24.4 Possible Dump Site G – 1957 2-36
2.1.24.5 Possible Dump Sites – 1970 2-37
2.1.24.6 Site M Parcel 1 2-38
2.1.24.7 Site M Parcel 2 2-39
2.1.24.8 Site M Parcel 3 Golf Course Maintenance Facilities, SWMUs 131-137 2-40
2.1.24.9 Site M Parcel 7 2-41
2.1.24.10 Site M Parcel 8 2-42
2.1.24.11 Inactive Landfill 4 2-43
2.1.24.12 Pre-WWII Laundry 2-44
2.1.24.13 Taylor Avenue Buried Drum Site 2-45
2.1.24.14 Waste Storage/Disposal Area – 1938 2-46
2.1.24.15 Fill–1988 2-47
2.1.24.16 Small Pit – 1952 2-48
2.1.25 FGGM 96 (OU-46) – Former Motor Pools, Wash Racks, and Buildings 2-49
2.1.25.1 Former Motor Pool-1 (MP-1) and Wash Rack-4 (WR-4) 2-49
2.1.25.2 Motor Pool-2 (MP-2) 2-50
2.1.25.3 Former Motor Pool-3 (MP-3) and Wash Rack-2 (WR-2) 2-51
2.1.25.4 Former Motor Pool-4 (MP-4) 2-52
2.1.25.5 Former Motor Pool-5 (MP-5) 2-53
2.1.25.6 Former Motor Pool-6 (MP-6) 2-54
2.1.25.7 Motor Pool-7 (MP-7) and Wash Rack-6 (WR-6) 2-55
2.1.25.8 Former Motor Pool-8 (MP-8) 2-56
2.1.25.9 Motor Pool-9 (MP-9) 2-57
2.1.25.10 Former Motor Pool-10 (MP-10) 2-58
2.1.25.11 Motor Pool-11 (MP-11) and Wash Rack-7 (WR-7) 2-59
2.1.25.12 Motor Pool-12 (MP-10) and Wash Rack-8 (WR-8) 2-60
2.1.25.13 Motor Pool-13 (MP-13) and Wash Rack-9 (WR-9) 2-61
2.1.25.14 Motor Pool-14 (MP-14) 2-62

2.1.25.15 Motor Pool-17 2-63
2.1.25.16 Motor Pool-18 and Wash Rack-12 2-64
2.1.25.17 Former Motor Pool-19 and Wash Rack-13 2-65
2.1.25.18 Former Wash Rack-3 2-66
2.1.25.19 Wash Rack 5 2-67
2.1.25.20 Former Oil/Water Separator (SWMU 143) and Wash Rack (SWMU 144) 2-68
2.1.25.21 Debris and Stain – 1975 2-69
2.1.25.22 Chisholm Ave and 6th Street 2-70
2.1.25.23 Building 546 Photo Lab (SWMU 11) 2-71
2.1.25.24 Former Building 940 Motor Pool, Wash Rack, and Oil/Water Separator 2-72
2.1.25.25 Building 1007 – Army Reserves Motor Pool (SWMUs 14-18) 2-73
2.1.25.26 Building 2120c Vehicle Maintenance, Wash Rack, and Oil/Water Separators .. 2-74
2.1.25.27 Former Building 2128 Vehicle Maintenance 2-75
2.1.25.28 Former Building 2213 Painting and Sheet Metal Shop (SWMU 38) 2-76
2.1.25.29 Building 2227 Maintenance Shop, Wash Rack, and Oil/Water Separator 2-77
2.1.25.30 Former Building 2266 2-78
2.1.25.31 Building 2276 Warehouse (SWMU 63) and 1918 Warehouse (SWMU 64) 2-79
2.1.25.32 Building 2288 - Paint Storage Shed (SWMU 69) 2-80
2.1.25.33 Building 2482 Boiler Plant (SWMU 72) 2-81
2.1.25.34 Building 2490 Medical Lab (SWMU 74) 2-82
2.1.25.35 Building 2501 Maintenance (SWMU 75) and 1941 Processing (SWMU 76) 2-83
2.1.25.36 Oil/Water Separator and Wash Racks near Building 2630 2-84
2.1.25.37 Building 2724 – Outdoor Recreation Equipment Rentals Wash Rack 2-85
2.1.25.38 Building 2728 Wash Racks and Associated Oil/Water Separators 2-86
2.1.25.39 Former Building 2802 Dental Research Laboratory (SWMU 93) 2-87
2.1.25.40 Building 2804 Lab (SWMU 94) 2-88
2.1.25.41 Former Building 2805 Lab (SWMU 95) 2-89
2.1.25.42 Former Buildings 2810, 2811, and 2832 2-90
2.1.25.43 Building 3000 Screen Repair Industrial Shop (SWMU 98) 2-91
2.1.25.44 Building 4272 – 1941 Cold Storage (Non- SWMU 9) 2-92
2.1.25.45 Building 4411, Former Hospital (SWMU 99) 2-93
2.1.25.46 Building 4587 Motor Repair (SWMU 101) and 1934 Garage (SWMU 102). 2-94
2.1.25.47 Building 4680 Service Station and Past Vehicle Repair Shop (SWMU 103) 2-95
2.1.25.48 Building 6865 Wash Rack System for Former Golf Course Club House 2-96
2.1.25.49 Wash Rack and Oil/Water Separator Southeast of Former Building 8480 2-97
2.1.25.50 Building 8485 Vehicle Maintenance and Former Wash Rack 2-98
2.1.25.51 Building 8486 Maintenance Shop 2-99
2.1.25.52 Building 8487 Vehicle Maintenance 2-100

2.1.25.53 Buildings 8549, 8550, and 8551 (SWMU 121-128 and 149) 2-101
2.1.25.54 Building 9581 Wastewater Treatment Plant (SWMU 138) 2-102
2.1.25.55 Possible Vehicle Service Area A – 1943 2-103
2.1.25.56 Possible Vehicle Service Area B – 1943 2-104
2.1.25.57 Former Incinerator Building – 1943 (21 ½ Street) 2-105
2.1.25.58 Stained Soils along 3rd Street 2-106
2.1.25.59 Former Incinerator Site 2-107
2.2 Military Munitions Response Program Open Sites 2-108
2.2.1 FGGM-003-R-01 (OU-40) – Mortar Range 2-108
2.2.1.1 FGGM-003-R-01 – Mortar Area MRS 2-108
2.2.1.2 FGGM-003-R-02 – Training Area MRS 2-109
2.2.2 FGGM-007-R-01 (OU-44) – Inactive Landfill 2 – Tipton Army Airfield 2-110
2.3 Base Realignment and Closure Open Sites 2-111
2.3.1 FGGM 10 (OU-8) – Inactive Landfill 1 2-111
2.3.2 FGGM 20 (OU-15) – Ordnance Demolition Area 2-112
2.3.3 FGGM 21 (OU-16) – Medical Waste Site 2-113
2.3.4 FGGM 31 (OU-17) – Inactive Landfill 3 2-114
2.3.5 FGGM 72 (OU-27) – POL Storage Tanks 2-115
2.3.6 FGGM 73 (OU-28) – Maintenance Shops Buildings 85 and 90 2-116
2.3.7 FGGM 81 (OU-33) – Clean Fill Dump 2-117
2.3.8 FGGM 82 (OU-34) – Unexploded Ordnance Removal 2-118
2.3.9 FGGM 85 (OU-35) – UXO Tipton Army Airfield 2-119
2.3.10 FGGM 94 (OU-37) – Trap and Skeet Range 17 2-120
2.3.11 FGGM-001-R-01 (OU-38) – Clean Fill Dump 2-121
2.3.12 FGGM-002-R-01 (OU-39) – High Explosive Impact and Disposal Area 2-122
2.4 Unassigned Open Sites 2-123
2.4.1 6-Acre Little Patuxent River Site 2-123
2.4.2 Off-Post Groundwater Investigation--Nevada Avenue Area 2-124
2.5 Installation Restoration Program Sites Designated for No Further Action 2-125
2.5.1 FGGM 05 (OU-2) – Troop Boiler Plant 2-125
2.5.2 FGGM 36 (OU-20) – Photographic Laboratory, Building 4553 2-126
2.5.3 FGGM 95 (OU-45) – Former Landfill Sites 2-127
2.5.4 Possible Dump Site C – 1957 2-127
2.5.4.1 Possible Dump Site D – 1957 2-128
2.5.4.2 Possible Dump Site F – 1957 2-129
2.5.4.3 Site M Parcel 4 2-130
2.5.4.4 Site M Parcel 5 Concrete Pit/Telephone Pole 2-131
2.5.4.5 Site M Parcel 6 Historic Ground Scar 2-132

2.5.4.6 Site M Parcel 9 2-133
2.5.5 FGGM 96 (OU-46) – Former Motor Pools, Wash Racks, and Buildings 2-134
2.5.5.1 Building 294 Former Motor Pool (SWMU 10) 2-134
2.5.5.2 Building 1251 and Associated Wash Rack and Oil/Water Separator 2-135
2.5.5.3 Building 2121 Vehicle Maintenance 2-136
2.5.5.4 Former Building 2122 (SWMU 31) 2-137
2.5.5.5 Former Building 2123 (SWMU 32) 2-138
2.5.5.6 Building 2124 (SWMUs 33 & 34) 2-139
2.5.5.7 Former Building 2287 2-140
2.5.5.8 Building 2484 Medical Supply/Administration (SWMU 73) 2-141
2.5.5.9 Former Building 2831 Dental Clinic 2-142
2.5.5.10 Building 4552 -- (Non-SWMU 10) 2-143
2.5.5.11 Building 4554 Photo Lab (SWMU 100) 2-144
2.5.5.12 Building 6800 Wash Rack System for current Golf Course Club House 2-145
2.5.5.13 Building 8472 Dental Clinic (SWMU 109) 2-146
2.5.5.14 Former Buildings 2454, 2455, 2456, and 2457 (Non-SWMUs 1, 2, 3, and 4) . 2-147
2.5.5.15 Former Building 2801 Storehouse and 1941 Administrative (Non-SWMU 5) .. 2-148
2.5.5.16 Buildings 9802 and 9803 Barracks and Administrative 2-149
2.5.5.17 SWMUs 141 and 142 – Privately Owned Vehicles Wash Rack 2-150
2.5.5.18 Oil Tanks 2-151
2.5.6 Grant Street at Building 8484 – Spill Notification 2-152
2.5.7 20th Street at Route 175 near Building 1978 – Spill Notification 2-153
2.5.8 1st Street in front of Building 195 – Spill Notification 2-154
2.6 Military Munitions Response Program Sites Designated for No Further Action 2-155
2.6.1 FGGM-004-R-01 (OU-41) – Grenade & Bayonet Range A 2-155
2.6.2 FGGM-008-R – Grenade & Bayonet Range B 2-156
2.6.3 FGGM-005-R-01 (OU-42) – Pistol Range A 2-157
2.6.4 FGGM-006-R-01 (OU-43) – Pistol Range B 2-158
2.7 Base Realignment and Closure Sites Designated for No Further Action 2-159
2.7.1 FGGM 32 (OU-18) – Fire Training Area (part of Tipton) 2-159
2.7.2 FGGM 80 (OU-32) – Helicopter Hangar 90 (part of Tipton) 2-160
3.0 Site Management Schedules 3-1
3.1 Assumptions for Site Management Plan Schedules 3-1
3.2 Site Management Plan Schedules 3-1
4.0 References 4-1

Appendices

Appendix A: EPA's Acceptance of 2009 SMP and 2010 Amended SMP

List of Tables

Table 1-1: Cross Walk of Environmental Sites at Fort Meade 1-4
Table 3-1: Summary of Submittals due Through June 15, 2012 3-2
Table 3-2: Project Schedules for Open Sites at Fort Meade 3-17
Table 3-3: PA/SI AOI Summary by Geographic Area 3-18

List of Plates

Site Management Plan, All Locations ..... (in pocket of report)

List of Acronyms and Abbreviations

μg .....microgram
AAFES.....Army and Air Force Exchange Service
AEDB-R.....Army Environmental Database-Restoration
AOC.....area of concern
AOI .....area of interest
AST .....above-ground storage tank
AWG.....Asymmetric Warfare Group
BEHP.....bis (2-Ethylhexyl) phthalate
BRAC .....Base Realignment and Closure
BTAG.....Biological Technical Assistance Group
BTEX.....benzene, toluene, ethylbenzene, and xylenes
CEMP .....Comprehensive Expansion Master Plan
CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act
CFD.....Clean Fill Dump
CCl_4 .....Carbon Tetrachloride
COMAR .....Code of Maryland Regulations
COPC.....chemicals of potential concern
CSA.....Comprehensive Site Assessment
CSF .....Covered Storage Facility
CSL .....Closed Sanitary Landfill (formerly the Active Sanitary Landfill)
DCB.....1,4-dichlorobenzene
DCE.....cis-1,2-dichloroethene
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
ECP.....Environmental Condition of Property
ED .....Environmental Division
EE/CA.....Engineering Evaluation/Cost Analysis
EMO .....Environmental Management Office
EMS.....Environmental Management System
EPA.....U.S. Environmental Protection Agency
ER,A.....Environmental Restoration, Army
ERA.....ecological risk assessment
ERIS.....Environmental Restoration Information System
ESD.....Explanation of Significant Difference

FFA .....Federal Facility Agreement
FFS.....Focused Feasibility Study
FGGM.....Fort George G. Meade
Fort Meade .....Fort George G. Meade
FS.....Feasibility Study
FSP .....Field Sampling Plan
FTA.....Fire Training Area
FY.....Fiscal Year
HEI .....High Explosives Impact and disposal area
HHA.....Helicopter Hanger Area
HHRA .....human health risk assessment
HI.....hazard index
HRR.....Historical Records Report
IAL.....Inactive Landfill
IAP.....installation action plan
ICAP .....Inductively Coupled Argon Plasma
IRA .....Interim Removal Action
IRP .....Installation Restoration Program
J&E.....Johnson & Ettinger
kg.....kilogram
L .....liter
LOC .....Library of Congress
LPH .....liquid petroleum hydrocarbon
LTGM .....long-term groundwater monitoring
LTM .....long-term monitoring
LUC .....land use control
LUCIP.....land use control implementation plan
MC.....munitions constituents
MCL.....Maximum Contaminant Level
MCPA .....2-methyl-4-chlorophenoxyacetic acid
MCPP .....methylchlorophenoxypropionic acid
MDC .....Maximum Detected Concentration
MDE .....State of Maryland Department of the Environment
MDL.....Method Detection Limit
MEAT .....Maryland Environmental Assessment Technology
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
MRSPP.....Munitions Response Site Prioritization Protocol Score
MTBE .....methyl tert-butyl ether
MW .....monitoring well
NFA .....no further action
NPL .....National Priority List
NSA.....National Security Agency
NT.....North Track
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
PBC.....performance-based contract
PCBs .....polychlorinated biphenyls
PCE.....tetrachloroethene
PID .....photo-ionization detector
PLF.....Post Laundry Facility
PMR .....Phoenix Military Reservation
POE.....point of exposure
POL .....petroleum, oil, and lubricants
PP.....Priority Pollutant
PRR.....Patuxent Research Refuge
PRR-NT.....Patuxent Research Refuge-North Tract
PVC.....polyvinyl chloride
RAO.....Remedial Action Objective
RBC.....risk-based concentration
RC .....Response Complete
RCRA .....Resource Conservation and Recovery Act
RDX.....Royal Demolition Explosive (cyclotrimethylene trinitramine)
RFA .....RCRA Facility Assessment
RI.....Remedial Investigation
RIA .....Remedial Investigation Addendum
RI/FS .....Remedial Investigation/Feasibility Study
RL.....Reporting Limit
ROD .....Record of Decision
RRSE .....Relative Risk Site Evaluation

RSL .....Regional Screening Level
SBCR .....Soil Background Concentration Report
SI.....Site Inspection
SIA.....Site Inspection Addendum
SLERA.....screening-level ecological risk assessment
SMP .....Site Management Plan
SWMU .....Solid Waste Management Unit
SRS.....Sensitive Receptor Survey
SVOC .....semivolatile organic compound
TAA OU.....Tipton Airfield Area Operable Unit
TAL.....Target Analyte List
TAP .....Tipton Airfield Parcel
TAP OU.....Tipton Airfield Parcel Operable Unit
TCL.....Target Compound List
TCLP .....toxicity characteristic leaching procedure
TCE .....trichloroethene
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
UAO.....unilateral administrative order
USACE .....U.S. Army Corps of Engineers
USACHPPM .....U.S. Army Center for Health Promotion and Preventive Medicine
USAEC .....U.S. Army Environmental Center
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
USGS .....U.S. Geological Survey
UST .....underground storage tank
UWS.....Uncontrolled Waste Site
UXO.....unexploded ordnance
VOC.....volatile organic compound
WWI.....World War I
WWII.....World War II
WR .....Wash Rack

Notes:

The format of this yearly update of the SMP has changed significantly from previous versions. In order to streamline the information and make it more user friendly. Additional information ("backup" information) for each Area of Interest (AOI) listed in the SMP can be found in the previous versions of the SMP. The "backup" information contained in the previous versions include a more detailed site history, additional site figures (including aerial photographs), and Appendixes containing Partnering meeting PowerPoint slides and chemical analysis action levels.

The Fort Meade Environmental Management Office (EMO) has subsequently changed its name and is currently identified as the Environmental Division (ED). Most of the reference documents used to compile this Site Management Plan (SMP) refers to the EMO. In order to be consistent with the source documents, this SMP will use the same acronym that the source document used.

Some of the Areas of Interest (AOIs or sites) in this SMP that were previously investigated had results presented to the Fort George G. Meade Partnership to evaluate the data and determine a path forward. The Partnership included representatives from the Environmental Protection Agency (EPA), Maryland Department of the Environment (MDE) and other stakeholders. It was determined during the Partnering Meetings that a recommendation of "no further action (NFA)" was warranted for many of those AOIs, which are discussed in the 2009 *Revised Final Site Management Plan*. The EPA reviewed the 2009 *Final Site Management Plan* and determined additional evaluations of those AOIs were indeed warranted.

The EPA's Regional Screening Levels (RSLs) are the default action levels for most sites at the installation. RSLs were historically identified as 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.

1.0 Introduction

This document is the Fiscal Year (FY) 2011 (FY11) Site Management Plan (SMP) Annual Update for Fort George G. Meade (Fort Meade or FGGM) in Anne Arundel County, Maryland. The SMP was conducted in support of the U.S. Army Corps of Engineers (USACE) Baltimore District under Contract W912DR-09-D-0017, Delivery Order 0013. Overall coordination of the SMP and contract management was provided by the USACE-Baltimore District.

The purpose of the SMP is to summarize the current status of all environmental sites and the planned activities to be conducted at the Installation, and to project long-term progress 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 June 18 and 19, 2009. The FFA went into effect October 6, 2009. The SMP is 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 environmental investigations and several have undergone or are undergoing response action. Proposed environmental cleanup responses and actions, and schedules and milestones for response actions are included in this SMP.

The sites listed in the SMP were compiled from many sources of information. The principal sources were the Fort Meade Environmental Division, the Preliminary Assessment/Site Investigation (PA/SI) (URS, 2007) and Installation Action Plans (IAPs).

Numerous sites at Fort Meade have changed names or designations over time or have acquired additional designations. To aid the reader in locating specific sites, a cross check table is included as Table 1-1. This table provides the following, as applicable, for each site:

- Operable Unit (OU) number
- Fort George G Meade (FGGM) number
- 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

1.2 Objectives of the Site Management Plan

The objective of the SMP is to summarize the status of each environmental site in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process for all response actions at FGGM, including sites that fall under the Installation Restoration Program (IRP) and Base Realignment and Closure (BRAC). The SMP includes a history of the sites evaluated by the Fort Meade Environmental Partnership. Factors supporting past decisions are discussed in appropriate detail to reflect 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 an SMP facilitates annual adjustment 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 site, this document includes:

1. A listing of all identified site names
2. Proposed environmental cleanup responses and actions, and schedules for response actions
3. Deadlines for the submittal of primary documents covering the current year
4. Identification of any primary actions:
    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 as additional information becomes available. This current document is the 2011 annual update. EPA's Acceptance of the 2009 and 2010 SMPs are included in Appendix A. Response to comments on the Draft 2010 SMP will be included in Appendix B.

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. (Figure FGGM-1). Figure FGGM-2 presents the jurisdictional boundary map of Fort Meade. The community of Odenton, Maryland, borders the eastern edge of Fort Meade. In general, the topography of Fort Meade is characterized by flat land that 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

FGGM began operation in 1917 as Camp Meade, 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. 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 U.S. Department of the Interior's (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.

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 November 1, 1999.

Following the 1988 BRAC realignment, the installation covers 5,142 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. FGGM contains approximately 65.5 miles of paved roads, 3.3 miles of secondary roads, and about 1,300 buildings.

FGGMs 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 over 80 partner organizations from all four DoD military services and several federal agencies. Major tenant units include the National Security Agency (NSA), the Defense Information School, the U.S. Army Intelligence and Security Command, the Naval Security Group Activity, the 70th Intelligence Wing (Air Force), the 902nd Military Intelligence Group (Army), Defense Information System Agency (DISA), Defense Mapping Agency (DMA) and EPA.

1.5 National Priorities Listing

The EPA placed Fort Meade on the National Priority List (NPL) on July 28, 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 (PLF). Contamination at these sites included solvents, pesticides, polychlorinated biphenyls (PCBs), heavy metals, waste fuels, and waste oils. Based upon 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 November 1, 1999.

1.6 Information Repositories

Fort Meade environmental information can be found at Fort Meade's Environmental Management System (EMS) Web site: http://www.fortmeade-ems.org/public/environmental/. The Administrative Record and the Information Repository are in Building 239 at FGGM. Information can also be found at the Anne Arundel County Library – West County Branch.

Table 1-1: Cross Walk of Environmental Sites at Fort Meade

Operable Unit	FGGM Number	SWMU Number	Building Number	Site Identifier	Status
OU-06	FGGM 03	SWMU 129 and 130	Building 8688	Wastewater treatment plant	OPEN
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 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	Hazardous waste storage facility/Control hazardous substance storage facility	OPEN
OU-12	FGGM 17			Closed Sanitary Landfill	OPEN
				Monitoring wells 125D and 126D	OPEN
OU-13	FGGM 18			Ammunition Supply Point No. 2	OPEN
OU-14	FGGM 19			Advanced Waste Water Treatment Plant	OPEN
OU-15	FGGM 20			Ordnance Demo Area – BRAC	OPEN
OU-16	FGGM 21			Medical Waste Site – BRAC	OPEN
OU-17 Tipton Airfield Area Operable unit (TAA OU)	FGGM 31			Tipton Inactive Landfills 2 and 3 –- BRAC Inactive Landfill 2 is also listed under FGGM-007-R-01	OPEN
OU-18 TAP OU	FGGM 32			Fire Training Area – BRAC	OPEN
OU-19	FGGM 33		Former Building 2283	Battery shop building.	OPEN
OU-20	FGGM 36	Non-SWMU 10 and 11	Buildings 4552 and 4553	Photographic laboratory Building, oil/water separator and wash racks (WRs)	CLOSED

Operable Unit	FGGM Number	SWMU Number	Building Number	Site Identifier	Status
OU-20	FGGM 36	SWMUs 105, 106, 107, 108	Building 6530	Photographic laboratory Building	OPEN
OU-21	FGGM 37	SWMU 71	Building 2480	Kimbrough Army Hospital	OPEN
OU-22	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.	OPEN
OU-23	FGGM 49		Buildings 2286 and 2246	DOL (Department of Logistics) Building 2286 is also under FGGM 86 Building 2246 is also under FGGM 92	OPEN
OU-24	FGGM 51		Building 2217	Spill site	OPEN
OU-25	FGGM 70	SWMU 150	Building 6513	Indoor Range Former Building 6513 (SWMU 150)	OPEN
OU-26	FGGM 71	SWMU 151 and 152	Building 6522	Ex indoor range Former Building 6522 (SWMUs 151-152)	OPEN
OU-27	FGGM 72			Petroleum, Oil, and Lubricants (POL) Storage Tanks – BRAC	OPEN
OU-28	FGGM 73		Buildings 85 and 90	Maintenance Shops Buildings 85 and 90 – BRAC	OPEN
OU-29	FGGM 74	SWMU 1, 2, 3, 4, 5, 6, 7, 8, 9	Buildings 71, 72, 72A	U.S. Architect of the Capitol (USAOC) site	OPEN
OU-30	FGGM 75			Underground Storage Tanks prior to 1984	OPEN
OU-32	FGGM 80		Helicopter Hangar #90	Helicopter Hangar 90 – BRAC Helicopter Hanger Area (HHA)	OPEN
OU-33	FGGM 81			Clean Fill Dump – BRAC The CFD OU consists of the CFD and the Uncontrolled Waste Site (UWS), 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 see FGGM-002-R-01	OPEN
OU-1	FGGM 83	SWMU 153 and 154	Buildings 2047 and 2046	Former trap and skeet range Building 2047 is SWMUs 153 and 154	OPEN
OU-35	FGGM 85			Unexploded Ordnance (UXO) Tipton Army Airfield - BRAC	OPEN

Operable Unit	FGGM Number	SWMU Number	Building Number	Site Identifier	Status
OU-4	FGGM 86	SWMU 65, 66, 67, 70	Building 2286 and former Buildings 2285 and 2290	Former Motor Pool (MP) Maintenance Facility.	OPEN
OU-3	FGGM 87	SWMU 22, 23, 24, and 145	Buildings 1974, 1976, 1977, and 1978	Former Nike Fire Control Site Buildings	OPEN
OU-4	FGGM 88	SWMU 37	Building 2207, 2201, 2204, and 2206	Former tank maintenance facility shop	OPEN
	FGGM 89	SWMU 39, 40, 41	Building 2217, oil/water separator 20, Wash Rack K	Former tank maintenance facility, oil/water separator and Wash Rack	OPEN
	FGGM 90	SWMU 45, 46, 47, 48, 49, 50, 51, 52, 53, 54	Buildings 2240, 2241, 2242, 2243, 2247, 2248, 2249	Former Tank Cleaning Supply Warehouse.	OPEN
	FGGM 91	SWMU 42	Building 2220	Groundwater at Former Missile Repair Shop Building 2220.	OPEN
	FGGM 92	SWMU 55, 56, 57, 58, 61, 62	Buildings 2246, 2246D, 2244, 2245, 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			Possible Dump Site A-1957 – Former Compliance Cleanup site	OPEN
	95			Possible Dump Site B-1957	OPEN
	(Former			Possible Dump Site C-1957	CLOSED
	Landfill			Possible Dump Site D-1957	CLOSED
	Sites)			Site 1957E	OPEN

Operable Unit	FGGM Number	SWMU Number	Building Number	Site Identifier	Status
OU-45	FGGM 95			Possible Dump Site F-1957	CLOSED
				Possible Dump Site G-1957	OPEN
				Possible Dump Sites - 1970	OPEN
				Site M - Parcel 1	OPEN
				Site M - Parcel 2	OPEN
		SWMU 131, 132, 133, 134, 135, 136, 137	Buildings 8860, 8870, 8880, 8881 8890, 8890A, 8891	Site M - Parcel 3 Golf Course Maintenance Facilities	OPEN
				Site M - Parcel 4 former training area	CLOSED
				Site M - Parcel 5 farm house	CLOSED
				Site M - Parcel 6	CLOSED
				Site M - Parcel 7 training area	OPEN
				Site M - Parcel 8	OPEN
				Site M - Parcel 9 ground scar	CLOSED
				Inactive Landfill 4	OPEN
				Pre-WWII laundry at USAOC	OPEN
				Taylor Avenue Buried Drum Site	OPEN
				Waste storage/ disposal 1938	OPEN
				Fill – 1988	OPEN
				Small Pit –1952	OPEN
OU-46	FGGM 96			MP-1/WR-4	OPEN
				MP-2	OPEN
				MP-3/WR-2	OPEN
				MP-4	OPEN
				MP-5 (Possible Vehicle Storage Area – 1957)	OPEN
				MP-6	OPEN
				MP-7/WR-6	OPEN
				MP-8	OPEN
				MP-9	OPEN
				MP-10	OPEN
				MP-11/-WR-7	OPEN
				MP-12/-WR-8	OPEN
				MP-13/-WR-9	OPEN

Operable Unit	FGGM Number	SWMU Number	Building Number	Site Identifier	Status
OU-46	FGGM 96			MP-14	OPEN
				MP-17	OPEN
				MP-18/-WR-12	OPEN
				MP-19/-WR-13	OPEN
				WR-3	OPEN
				WR-5	OPEN
				Debris and Stain – 1975	OPEN
				Chisholm Ave and 6th Street	OPEN
		SWMU 010	Building 294	DPW (Directorate of Public Works) Entomology Department	CLOSED
		SWMU 011	Building 546	Photography Laboratory	OPEN
		SWMU 012, 013, and 146	Building 940	MP and Associated Wash Rack and Oil/Water Separator	OPEN
		SWMU 014, 015, 016, 017, and 018	Building 1007	Army Reserve MP, vehicle maintenance, motor repair shop, oil/water separator and Wash Rack	OPEN
		SWMU 019, 020, and 021	Building 1251	Administrative and vehicle and equipment storage	CLOSED
		SWMU 025, 026, 027 and 028	Building 2120c	Vehicle storage and maintenance oil/water separator and Wash Rack	OPEN
		SWMU 029 and 030	Building 2121	Vehicle maintenance	CLOSED
		SWMU 031	Building 2122	Vehicle maintenance	CLOSED
		SWMU 032	Building 2123	Tent/Jeep storage	CLOSED
		SWMU 033 and 034	Building 2124	Vehicle and tool storage, vehicle maintenance	CLOSED
		SWMU 035 and 036	Building 2128	Vehicle maintenance and 1941 vehicle maintenance. MP-16 & Wash Rack (WR)-11	OPEN
		SWMU 038	Building 2213	Sheet metal and sign fabrication shop	OPEN
		SWMU 043, 044, and 147	Building 2227 and 2224	Building, wash rack and oil/water separator demolished 1999	OPEN

Operable Unit	FGGM Number	SWMU Number	Building Number	Site Identifier	Status
OU-46	FGGM 96		Building 2266	No issues associated with this building	OPEN
		SWMU 063 and 064	Building 2276	Furniture repair shop	OPEN
		SWMU 068	Building 2287	NSA MP storing equipment and chemicals. Located within the outline of FGGM 86	CLOSED
		SWMU 069	Building 2288	Paint storage shed. May be located within the outline of FGGM 87	OPEN
		SWMU 072	Building 2482	Used oil recycling tack at hospital boiler plant	OPEN
		SWMU 073	Building 2484	Hospital chemical facility	CLOSED
		SWMU 074	Building 2490	Forensic toxicology and drug testing lab	OPEN
		SWMU 075 and 076	Building 2501	Shipping and receiving	OPEN
		SWMU 077, 078, and 079	Building 2630	Dispatch, storage and parking area for emergency medical units, wash rack	OPEN
		SWMU 080, 081, 082, 083, 084, 085, 086	Building 2724	Directorate of Personnel and Community Activities Outdoor Recreation Equipment Rentals, Wash Rack.	OPEN
		SWMU 087, 088, 089, 090, 091, 092, 148	Building 2728	Out of Service Wash Racks, Recreational Equipment Storage, oil/water separator, RV storage and maintenance shop	OPEN
		SWMU 093	Building 2802	Dental research lab (demolished in 2000). Dayroom (1941)	OPEN
		SWMU 094	Building 2804	Chemical storage, electron microscopy lab	OPEN
		SWMU 095	Building 2805	Laboratory/chemical storage Officer's mess hall (1941)	OPEN
		SWMU 096 and 097	Building 2831	Dentistry training and clinic, x-ray processing lab and chemical storage. Bldg demolished in 1999	CLOSED
		SWMU 098	Building 3000	Maintenance shop Screen repair, industrial shop	OPEN
		SWMU 099	Building 4411	Administrative Hospital (1930)	OPEN
		SWMU 100	Building 4554	Support facility for intelligence agencies Photo labs	CLOSED

Operable Unit	FGGM Number	SWMU Number	Building Number	Site Identifier	Status
OU-46	FGGM 96	SWMU 101 and 102	Building 4587	Equipment storage and Army and Air Force Exchange Service (AAFES) personnel vehicle repair shop and wash rack	OPEN
		SWMU 103	Building 4680	Gas station and detailing shop	OPEN
		SWMU 109	Building 8472	Dental clinic	CLOSED
		SWMU 110 and 111	Building 8480	Military vehicle and equipment storage	OPEN
		SWMU 115, 116, and 116A	Building 8485	Military Vehicle and Equipment Storage.	OPEN
		SWMU 117 and 118	Building 8486	MP	OPEN
		SWMU 119 and 120	Building 8487	MP	OPEN
		SWMU 121, 122, 123, 124, 125, 126, 127, 128, and 149	Building 8549, 8550, and 8551	Practice Hall and Instrument Storage for Musicians MP Maintenance facility with wash rack and oil/water separator	OPEN
		SWMU 138	Building 9581	Wastewater treatment plant	OPEN
		SWMU 139 and 140	Building 6800	Wash Rack and Oil Water Separator at current golf course club house	CLOSED
			Building 6865	Wash Rack and Oil Water Separator at former golf course club house	OPEN
		SWMU 141 and 142		POV wash rack	CLOSED
		SWMU 143 and 144		Wash rack and oil/water separator	OPEN
		Non-SWMU 1, 2, 3, 4	Buildings 2454, 2455, 2456, 2457	Administration Buildings	CLOSED
		Non-SWMU 12 and 13	Building 9802 and 9803	Troop Housing	CLOSED

Operable Unit	FGGM Number	SWMU Number	Building Number	Site Identifier	Status
OU-46	FGGM 96	Non-SWMU 5	Building 2801	Research/Administration Building (demolished in 1999-2000)	CLOSED
		Non-SWMU 6, 7, 8	Buildings 2810, 2811, 2832	Dental research buildings (all demolished in 1999-2000)	OPEN
		Non-SWMU 9	Building 4272	Vacant warehouse	OPEN
				Possible Vehicle Service Area A - 1943	OPEN
				Possible Vehicle Service Area B - 1943	OPEN
				Former Incinerator Building - 1943	OPEN
				Oil Tanks	CLOSED
				Stained Soils along 3rd Street	OPEN
				Former Incinerator Site - Reece Road	OPEN
OU-38	FGGM-001-R-01			Clean Fill Dump MMRP. FGGM 81 is clean fill dump IRP.	OPEN
OU-39	FGGM-002-R-01			High Explosive Impact And Disposal - BRAC	OPEN
OU-40	FGGM-003-R-01			Mortar range	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 – Tipton Army Airfield	OPEN
				6-Acre Little Patuxent River Site	OPEN
				Nevada Avenue	OPEN
			8484	Grant Street at Building 8484 – Spill Notification	CLOSED
			1978	20th Street at Route 175 near Building 1978 – Spill Notification	CLOSED
			195	1st Street in front of Building 195 – Spill Notification	CLOSED

Operable Unit	FGGM Number	SWMU Number	Building Number	Site Identifier	Status
			2234	Building 2234 located on Parade Field Lane	OPEN

2.0 Site Descriptions by Source Funding

2.1 Installation Restoration Program Open Sites

2.1.1 FGGM 03 (OU-6) – Water Treatment Plant, Building 8688 (SWMUs 129 and 130)

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA 1980-1982
SI.....1980-2011
IRA 1994
SWMU Study.....1996
Sampling Visits.....1999 and 2001
SIs..... 1996, 1999, and 2001
PA/SI.....2010-2012

Contaminants of Potential Concern: None identified

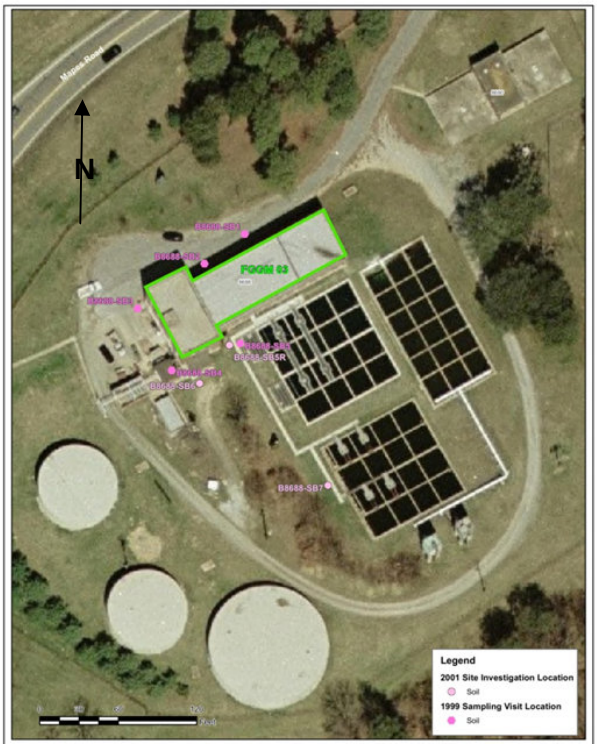
Media of Concern: None identified

Site Location: Grid F4, located in the southwestern portion of the base at the southeast corner of O'Brien Road and Mapes Road

Site Description: Building 8688 (SWMUs 129 and 130) was constructed in 1941 and operated as a wastewater treatment plant. 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 there is routine discharge of waste to the sanitary sewer.

Previous Studies: Over the course of previous investigations at this site, 3 surface soil samples (plus 1 duplicate sample); and 9 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.



Current use: Water treatment plant.

Current Status: The current PA/SI recommended no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.2 FGGM 07 (OU-5) – DRMO Drum Site

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA/SI.....1992-1994
RI/FS.....1994-2011
Site Investigation..... June 1995
IRA.....1995-1997
Sampling Visits ..... 1999 and 2006
Groundwater Investigation 2000
RI ..... 2000 and 2003
Baseline RA 2003
RA(C).....2004-2013
RD 2004-2012
RA(O).....2004-2025
FFS.....2007
FFS Technical Addendum on Pre-Design Plume Delineation and Data Collection 2010

Contaminants of Potential Concern: VOCs

Media of Concern: Groundwater

Site Location: Grid F5, located 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 is comprised of the Covered Storage Facility (CSF), located 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, 1 high voltage box, and 3,500 tons of contaminated soil were removed in 1995 after the discovery of a few buried drums on June 15, 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.

Current use: DRMO

Current Status: The Army's contractor completed 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. Additional RI fieldwork was completed by the Army in 2011 to address outstanding EPA comments with the 2003 RI and BRA.

Cleanup/Exit Strategy: Future work includes addressing outstanding EPA comments on the 2003 RI/BRA, preparing a revised Final RI, and revising the 2007 FFS accordingly.

2.1.3 FGGM 08 (OU-7) – Comp Ammunition Supply Point No. 1

Regulatory Driver: CERCLA

Previous Environmental Investigations

Enhanced PA 1989
SI 1992
PA 1995-1996
SI 1995-2011
IRA 1998-1999
Groundwater RI 2007
PA/SI 2010-2012

Contaminants of Potential Concern: Metals.

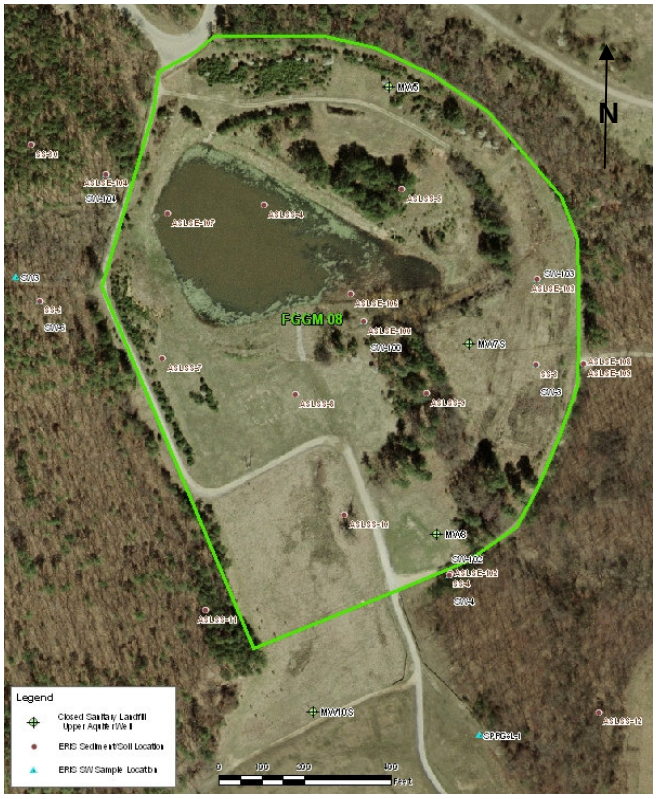
Media of Concern: Soil

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

Site Description: This AOI is located within the outline of the CSL. Chemical munitions used at FGGM included smoke grenades and RCAs for training purposes (Argonne, 1989). These items were stored at ASP 1. Riot control agents were stored in bulk (50-lb drums), canister, and capsule form. The smoke grenade includes HC (which is 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, six subsurface soil, one surface water sample, and six sediment samples were collected and submitted for laboratory analysis. In addition, both shallow and deep groundwater at the CSL has been monitored, including explosives and some wells are located near ASP-1.

Soil samples were collected around the magazine locations (EM Federal, 2007). One surface and one subsurface soil sample were collected from each of 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, the risk numbers are below site-specific action levels.



Current use: Grass, trees, and a pond occupy this AOI.

Current Status: The current PA/SI recommended no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.4 FGGM 11 (OU-9) – Gas Training Building 73

Regulatory Driver: CERCLA

Previous Environmental Investigations

Comprehensive Site Assessment.....1997

PA.....1997

SI .....1997 to 2011

PA/SI.....2010 to 2012

Contaminants of Potential Concern: CS and cyanide

Media of Concern: Soil and groundwater

Site Location: Grid H6, Building 73 is located in the southeast portion of the installation, southwest of the Closed Sanitary Landfill.

Site Description: Building 73 was formerly a Gas Training Building and is identified as a gas chamber on maps from 1976 (DMA, 1976) and 1980 (COE, 1980). Building 73 has concrete floors and walls. Building 73 was used for tear gas training during WWI and respiratory protection training for riot control agents from 1965 to 1979. Building 73 was later converted for use by the Defense Information School for urban facility inspection training.

Previous Studies: Over the course of previous investigations at this site, 7 wipe samples were collected from interior building material surfaces on March 14, 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.

Current use: Vacant building

Current Status: A PA/SI is underway with a recommendation to collect three surface soil samples to be analyzed for CS and cyanide; install three groundwater monitoring wells, collect and analyze groundwater samples for CS and cyanide.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

Prior to AOI closeout, Building 73 should be properly decontaminated in a manner appropriate for CS, which is a strong irritant that is incompatible with strong oxidizers.

2.1.5 FGGM 13 (OU-10) – Former Pesticide Shop, Building 6621

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA/SI.....1997
Site Investigations..... 1997, 2003, and 2004
RI/FS.....2004-2012
RD 2012-2012
RA(C).....2012-2012
RA(O).....2012-2017
LTM 2017-2022

Contaminants of Potential Concern: Pesticides and metals

Media of Concern: Soil and groundwater

Site Location: Grid F4, south of the Fort Meade golf course at the southwest corner of the intersection of York Avenue and Gordon Street.

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

Previous Studies: Site investigations were conducted after the building was demolished and the site regraded. Soil sampling results indicate that the following chemicals were detected above EPA Region 3 RBCs: chlordane, alpha-chlordane, gamma-chlordane, 4,4-DDD, 4,4-DDE, 4,4-DDT, 2,4-D, heptachlor, dieldrin, arsenic, and mercury. Groundwater was not assessed. In June 2007, the Draft Final RI determined that surface and shallow subsurface soils at the former Pesticide Shop are contaminated with pesticides (primarily chlordane) and arsenic. The pesticide contamination is more extensive than the arsenic contamination (URS, 2007c).

Current use: The site is vacant and covered with grass.

Current Status: Additional RI work conducted in 2010 indicated that groundwater is contaminated with pesticides at low levels (primarily chlordane), Groundwater pesticide concentrations decrease substantially away from the pesticide handling area. PCE was also detected in two wells in the vicinity of the former pesticide shop and also decrease in concentration away from the pesticide handling area to non-detect. The human health risk assessment (HHRA) is being run as part of finalizing the RI scheduled for completion in FY2011

Cleanup/Exit Strategy: An FS is being developed to assess soils actions including no action, LUCS, and removal. Possible groundwater actions included include no action, LTM, and in-situ bioremediation.

2.1.6 FGGM 14 – Building 6527 Control Hazardous Substance Storage Facility

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA.....1980-1982

SI.....1980-2011

SWMU Study..... 1996

Hazardous Waste Closure Report 1999

Sampling Visit..... 2000

Data Gap Investigation 2002

PA/SI 2010-2012

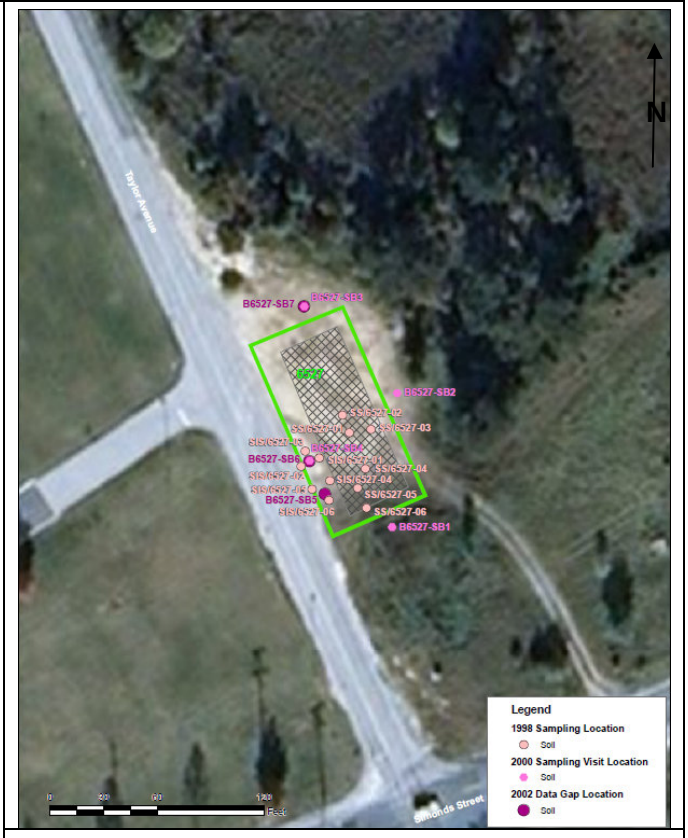
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F4, located 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 offsite 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.



Current Use: Grass and trees occupy this AOI.

Current Status: The current PA/SI recommended no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.7 FGGM 17 (OU-12) – Closed Sanitary Landfill

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA/SI.....1980-1992
RI/FS.....2001-2012
RD 2012-2013
IRS.....1998
RA(C).....2013-2018
RA(O).....2013-2018
LTM 2018-2023

Contaminants of Potential Concern: VOCs, metals, and pesticides

Media of Concern: Soil and groundwater

Site Location: Grid H6, located along the southeastern boundary of the installation, south of State Route 32.

Site Description: Landfilling operations were conducted at FGGM 17 from 1958-1976, using the trench fill method. FGGM 17 was constructed as an unlined facility with no leachate collection system and was initially designated as the Active Sanitary Landfill. FGGM 17 was divided into Cell 1 and Cell 2. These 2 cells were separated by a drainage swale. Cell 3 (a 3rd area that lacks topographic expression) was the only trench type disposal area. Cells 1 and 2 were capped with clay in 1992.

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 cells to control emissions from the site.

Previous Studies: Soil borings were drilled to characterize the depth and nature of the waste materials in the Cell 3 area. Surface soil samples were collected from the landfills to help assess potential exposure pathways. Groundwater, surface water, and sediment samples are collected on a predetermined schedule.

Current use: The CSL was closed in January 1996. Much of the surrounding area is wooded and several areas are identified as wetlands.

Current Status: Semiannual groundwater monitoring, monthly groundwater level gauging (including offsite wells), and active methane collection are ongoing at the CSL.

Cleanup/Exit Strategy: A Feasibility Study (FS) will be completed for the CSL possibly leading to a ROD with land use controls for the CERCLA site and continued post closure care monitoring of the landfill under RCRA.

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

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA.....1996

SI.....2009-2011

PA/SI.....2010-2012

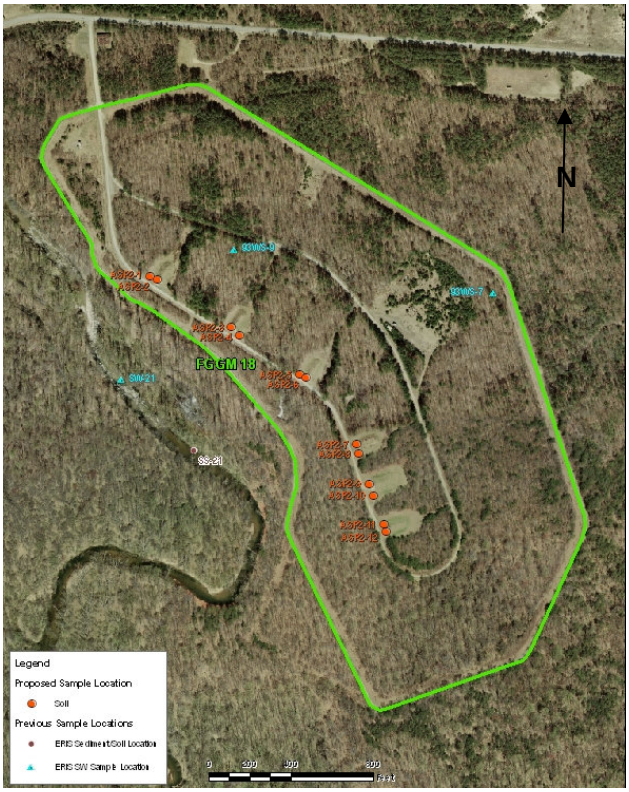
Contaminants of Potential Concern: metals and explosives

Media of Concern: Soil and groundwater

Site Location: Grid F6, FGGM 18 is located in the north-central portion of the Patuxent Research Refuge-North Track (PRR-NT), south of the Tipton parcel.

Site Description: the 1989 Enhanced Preliminary Assessment Report (Argonne, 1989) states that: "Chemical munitions used at FGGM 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 HC (which is 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. At the time of the site visit, all ammunition in ASP 1 has been moved to ASP 2."

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, SVOCs, metals, pesticides, herbicides, and PCBs. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels. However, the AOI was in use after this sampling, so additional sampling to characterize current conditions is warranted.



Current use: Grass, trees, roadways, and igloos cover this AOI.

Current Status: An SI is underway with a recommendation to collect 12 surface soil samples to be analyzed for metals and explosives.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.9 FGGM 19 (OU-14) – Advanced Waste Water Treatment Facility

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA.....1980-1982
SI 1980-2012
SWMU Study 1996
RFA 3rd Phase.....1999
Geophysical Survey 2004
PA/SI.....2010-2012

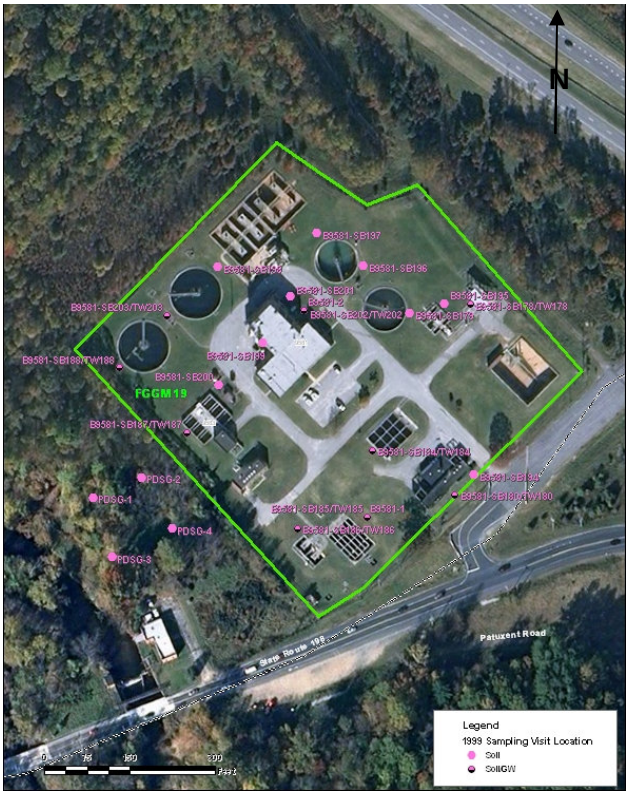
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid E4, The Advanced Waste Water Treatment Facility is located in the southwest portion of the installation, approximately 600 feet southwest of the intersection of State Route 32 and State Route 198.

Site Description: FGGM 19 is identified as the Advanced Wastewater Treatment Facility. FGGM 19 includes Building 9581 - Wastewater Treatment Facility (also identified as SWMU 138) and is located northeast of Possible Dump Site G-1957. SWMU 138 and Possible Dump Site G-1957 are discussed separately.

Previous Studies: Over the course of previous investigations at this site, one surface soil samples, 18 subsurface soil samples, and nine 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.



Current use: Waste Water Treatment Facility

Current Status: The current PA/SI recommends no further action for this AOI. Since there is a duplication of site names for this AOI, FGGM 19 can be administratively closed, any further action at this site will be covered under SWMU 138.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.10 FGGM 31 (OU-17) – Tipton Inactive Landfill 2

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA/SI 1980-1982
Site Investigation .....1994 and 1998
RI/FS 1995-1998
Ordnance Survey..... 1994
Ordnance Clearance..... 1995–1997
Miscellaneous Debris Removal..... 1998
RD 1995-1999
RoD 1999
5 year reviews..... 2005, 2011

Contaminants of Potential Concern: VOCs, SVOCs, and TPH

Media of Concern: Groundwater

Site Location: Grid E6, located east of State Route 198 and south of State Route 32 on the southern portion of the Tipton Army Airfield on approximately 10 acres of land north of New Tank Road (now Wildlife Loop).

Site Description: FGGM 31 is listed as Inactive Landfills (IALs) 2 and 3 in the Army Environmental Database-Restoration (AEDB-R). IAL2 and IAL3 are discussed separately in this SMP because they are funded under separate programs. IAL3 is a BRAC site, information about IAL3 can be found under the BRAC section (section 2.3.4) of the SMP. IAL2 was part of the BRAC Tipton Army Airfield but was excised from the legal description of the BRAC property and was retained by the installation. IAL2 is an active Army site, funded under the IRP and is discussed here.

IAL2 was initially operated as a soil borrow area from approximately 1938. Sometime after 1952 the area was operated as an unlined rubble disposal area that reached its maximum extent by 1963. Continued disposal activity occurred after 1980 in the northern portion of IAL2 where graded and disturbed areas are visible in 1986. 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.

Previous Studies: The RI report documents the findings associated with the TAP OU. These findings indicate that contaminants detected in the environment (including benzene and aminodinitrotoluene [amino-DNT]) do not pose unacceptable risks to human health and the environment.

Current use: Unused, grass and tree covered surrounded by a fence.

Current Status: FGGM 31 is currently monitored under a 1999 ROD. The June 1999 ROD for TAP OU established the site remedy for IAL1 and IAL2 as NFA with groundwater monitoring and 5-year reviews. Groundwater is sampled every 2 years and the need for continued monitoring is evaluated on a 5-year review cycle. Two 5-year reviews have occurred since the ROD was signed (USACE, 2005c and 2008d).

Cleanup/Exit Strategy: Future work includes continuation of the Corrective Measure Operation and Maintenance (O&M), which includes long-term groundwater monitoring (LTGM) and 5-year reviews as indicated in the schedule in Section 3.

2.1.11 FGGM 33 (OU-19) – Battery Shop, Building 2283

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA.....1991-1993

SI.....1991-1994

IRA.....1993-1994

Comprehensive Site Assessment 2000

RI/FS.....2002-2011

Well Closure Report..... 2003

PA/SI 2010-2012

Contaminants of Potential Concern: VOCs and metals

Media of Concern: Soil and groundwater

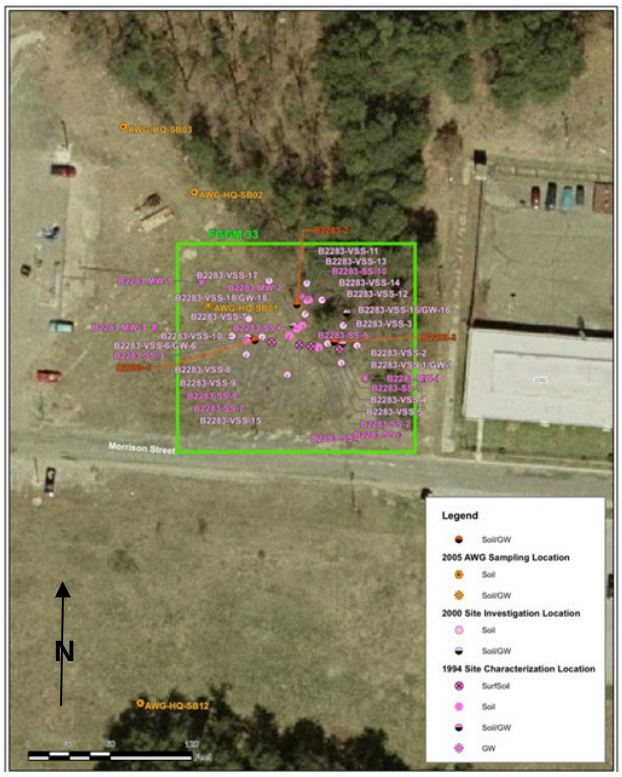
Site Location: Grid H5, Former Building 2283 was located in the southeast portion of the installation, approximately 500 feet west of the intersection of Morrison Street and Huber Road.

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 interim removal action 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. A risk analysis was not performed on the chemical data because the data was pre-removal action.



Current use: Grass and tree covered.

Current Status: A PA/SI is underway with a recommendation to collect three surface soil samples to be analyzed for VOCs and metals; install three groundwater monitoring wells, collect and analyze groundwater samples for VOCs and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.12 FGGM 36 (OU-20) – Photographic Laboratory, Building 6530

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU 1996

Historic Aerial Photograph Study.....1996

RFA 3rd phase.....1999

Data Gap Investigation.....2002

PA/SI.....2010-2012

Contaminants of Potential Concern: metals

Media of Concern: Groundwater

Site Location: Grid F4, Building 6530 is located 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 oil/water separator (SWMU 106), and wash racks (SWMUs 107 and 108). Approximately 1/3 of the building 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, anti-freeze, 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 oil/water separator (SWMU 106), which also receives waste water from two wash racks (SWMUs 107 and 108) at the site. An 800-gallon waste oil AST is located at the northern exterior wall of the building.

Previous Studies: As part of the RFA 3rd Phase, 16 direct-push borings were advanced around the building. 3 surface soil samples, 12 subsurface soil samples, and 1 groundwater sample were collected using a direct-push sampling rig. Based on a risk analysis of the analytical results, mercury, arsenic and chromium elevate the risk numbers above the site-specific action levels.

Current use: Unknown

Current Status: A PA/SI is underway with a recommendation to install one groundwater monitoring well and collect and analyze the groundwater sample for metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.13 FGGM 37 (OU-21) – Kimbrough Army Hospital Building 2480

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Sampling Visit 2000

PA/SI.....2010-2012

Contaminants of Potential Concern: Metals

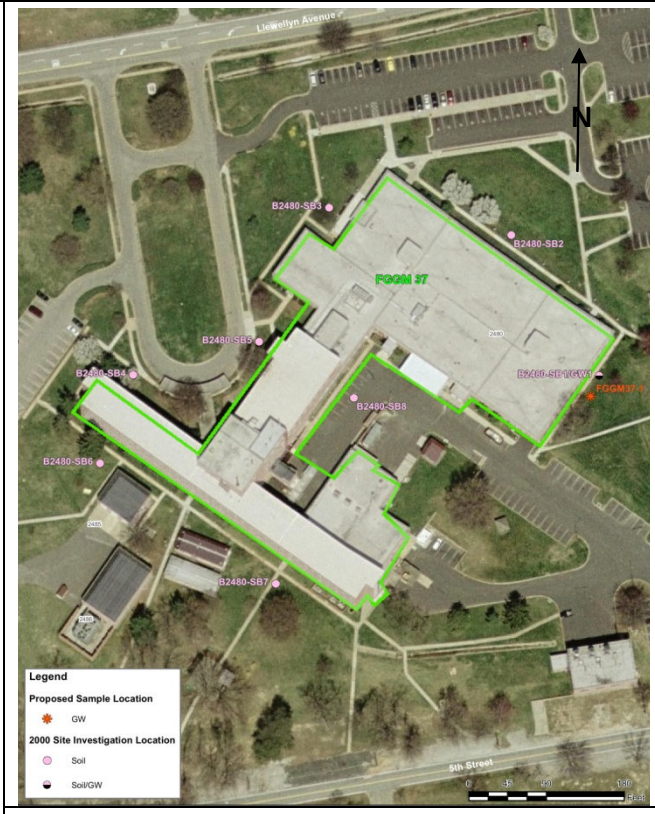
Media of Concern: Groundwater

Site Location: Grid H4, Building 2480 is located in the southeastern portion of the installation, approximately 100 feet east 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 within 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.



Current use: Medical Clinic

Current Status: A PA/SI is underway with a recommendation to install one groundwater monitoring well and analyze the groundwater sample for metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

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

2.1.14 FGGM 45 (OU-22) – Calibration Laboratory, Building 2220

Regulatory Driver: CERCLA

Previous Environmental Investigations

Sampling Visit 2000

SI 2001

PA/SI..... 2010-2012

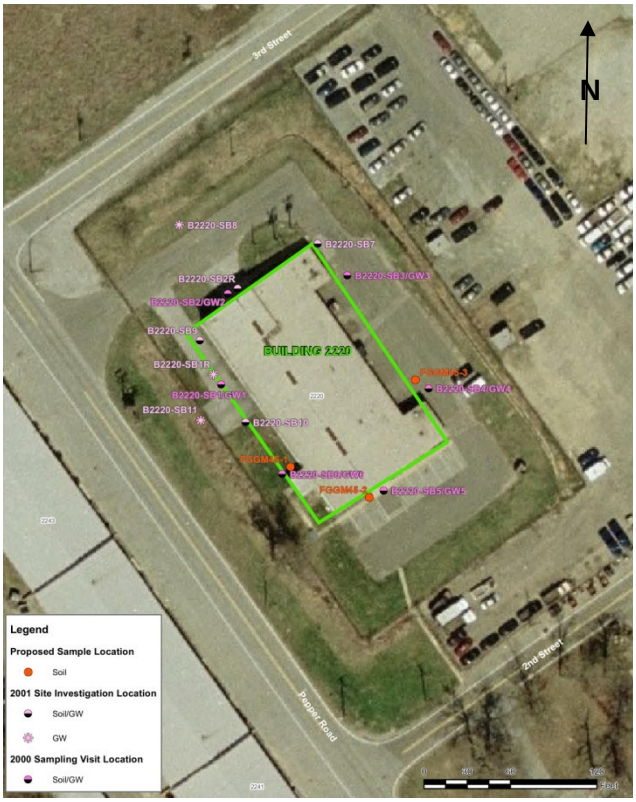
Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid H5, Building 2220 is located in the southeastern portion of the installation, approximately 300 feet east of the intersection of 3rd Street and Pepper Road.

Site Description: Building 2220 (SWMU 42) was constructed in the late 1950's or early 1960's 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 USTs were formerly located at the south side of the building; one was removed in 1992, and the other was 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, which is discussed as part of OU-4.

Previous Studies: Over the course of previous investigations at this AOI, four surface soil samples, six subsurface soil samples, and 13 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. However, since surface soil was only analyzed for herbicides and pesticides, additional surface soil samples should be collected.



Current use: Unknown

Current Status: A PA/SI is underway with a recommendation to collect three surface soil samples to be analyzed for VOCs, SVOCs, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.15 OU-4 Southeast Groundwater

Regulatory Driver: CERCLA

Previous Environmental Investigations

SI 2001

CEMP 2005

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

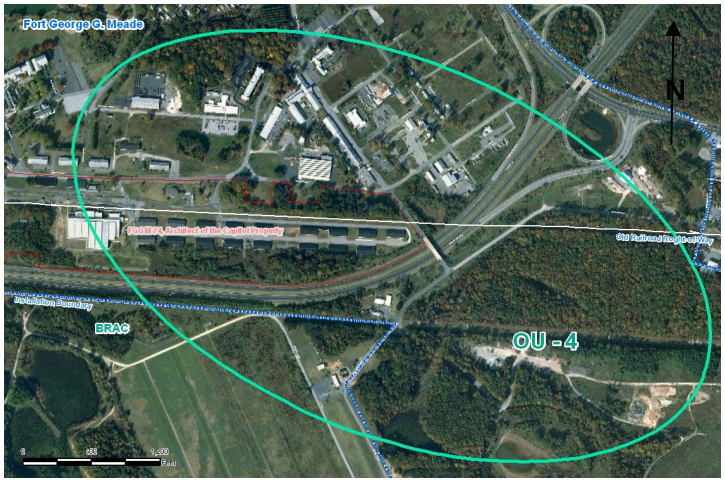
Media of Concern: Soil, groundwater, and soil vapor

Site Location: Grids G4, H4, G5, H5, H6, and I6. OU-4 is the groundwater plume located in the southeast portion of the installation.

Site Description: OU-4 is comprised of the following sites:

- FGGM-47: Post Laundry Building (Building 2250)
- 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 Shop (Building 2253)
- FGGM-49: DOL Buildings 2286 and 2246
- MWs 125d and 126d

Previous Studies: The precise location, history, and a summary of contamination of each site under OU4 are presented in the following subsections.



Current use: Varies from administrative to storage and commercial

Current Status: RI

Cleanup/Exit Strategy: Upon full delineation of extent of plume, implement a remedy agreed upon by all interested parties.

2.1.15.1 FGGM 47 (OU-4) – Post Laundry Facility, Building 2250

Regulatory Driver: CERCLA

Previous Environmental Investigations

Preliminary Soil Investigation..... 1989

Soil and Groundwater Investigations.....1990 and 1991

Quarterly Groundwater Monitoring.....1995-1998 and 2000

SWMU Study..... 1996

CSA..... 2000

RI.....ongoing

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil and groundwater

Site Location: Grid H5, Building 2250 is located approximately 300 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 were used during dry cleaning operations. Laundry and dry cleaning operations were discontinued in 1991 and the facility was converted to a recycling center.

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. Surface water samples and sediment samples were collected from the retention pond near State Route 32 in 1998.

Current use: Building 2250 is currently used as a recycling center.

Current Status: An RI investigation is ongoing and levels of VOCs in perched groundwater are at ppm levels. Sub-slab vapor concentrations are above screening levels and additional work will be conducted for soil vapor.

Cleanup/Exit Strategy: Actions will be evaluated to address groundwater and soil vapor concentrations in an FS.

2.1.15.2 FGGM 86 – Former Motor Pool Maintenance Facility

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

RFA 3rd Phase..... 1999

Site Investigations..... 2001 and 2002

Investigation Data Report..... 2005

RI ..... ongoing

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

Media of Concern: Groundwater

Site Location: Grid H5, FGGM 86 is located near the intersection of Wilson and Morrison Streets.

Site Description: 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, anti-freeze, acetylene, and argon gas cylinders.

Former Building 2285 (SWMU 65) was used for storage of paints and solvents until 1991. It was then mostly empty until 1995 when it was put into use by the 55th Signal for storage of cots, a lawnmower, and gasoline.

Building 2290 (SWMU 70) was used by Allied Trades for storage of paints, thinners, and enamels until 1988. It was empty from 1988 until it was also put to use by the 55th Signal for storage of equipment parts, wood, and metal. Building 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.

In an investigation of soils and groundwater at Building 2286 in 2004 (Versar, 2005b), lead was detected in soil at up to 892 mg/kg, and PCE and TCE were detected in groundwater at up to 2,960 µg/l and up to 342 µg/l, respectively.

Current use: The building currently contains two paint booths, a metal working area, a glass working area, a welding area, a sanding area, and an office.

Current Status: An RI is being performed.

Cleanup/Exit Strategy: Please refer to OU-4 for a discussion of the exit strategy.

2.1.15.3 FGGM 88 – Former Tank Maintenance Facility Shop-1

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Sampling Visit 1999

Initial Delineation..... 2000

RI ..... ongoing

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

Media of Concern: Soil and groundwater

Site Location: Grid H5, located 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 in use 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. The following exceedances of screening criteria were noted:

Soil: Arsenic exceeded the residential RBC, the industrial RBC, and the background mean in 2 of 17 samples tested. TPH-DRO was detected at up to 650,000 µg/kg.

Groundwater: Dissolved arsenic exceeded its tap water RBC. TPH-DRO was detected at up to 120,000 µg/L. TPH-GRO was detected at up to 56,000 µg/L.

Current use: This AOI 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 storage of construction materials, refrigerators, non-PCB-containing transformers, and fluorescent light bulbs.

Current Status: An RI is being performed.

Cleanup/Exit Strategy: Please refer to OU-4 for a discussion of the exit strategy.

2.1.15.4 FGGM 89 – Former Tank Maintenance Facility Shop-2

Regulatory Driver: CERCLA

Previous Environmental Investigations

Sampling visits ..... 1999, 2000, and 2001

Delineation Report 2000

SI 2001

RI ..... ongoing

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Groundwater

Site Location: Grid H5, located on 2nd Street between Pepper Road and Chisholm Avenue.

Site Description: FGGM 89 is comprised of the DOL Electric Shop Building 2217 (SWMU 39) and the DPW Storage Yard. Building 2217 is located in the southeast corner of the site. A former WR (SWMU 41) and a former OWS (SWMU 40) were located in the northwest corner of the site. Constructed in 1918, 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. The following exceedances of screening criteria were noted:

Arsenic in soil exceeded the residential RBC and the industrial RBC at 2 of 32 locations tested.

Metals were detected in all groundwater screening samples. 6 of these metals (arsenic, beryllium, chromium, lead, mercury, and thallium) had concentrations that exceeded their MCL or tap water RBC value (or at-tap action level in the case of lead).

Seven VOCs in groundwater (benzene; naphthalene; n-propylbenzene; chlorobenzene; DCB; 1,2,4-trimethylbenzene; and 1,3,5-trimethylbenzene) exceeded RBCs at 5 of 30 locations tested.

Current use: Building 2217 is currently used for storage of military vehicles, equipment, and small motors. The asphalt and gravel yard is currently used for storage of electrical transformers (non-PCB), electrical cables, boilers, water heaters, dishwashers, motors, and other equipment and machinery.

Current Status: An RI is being performed.

Cleanup/Exit Strategy: Please refer to OU-4 for a discussion of the exit strategy.

2.1.15.5 FGGM 90 – Former Tank Cleaning Supply Warehouse

Regulatory Driver: CERCLA

Previous Environmental Investigations

Sampling Visits ..... 1999 and 2000

SI 2000

RI 2003

RI ..... ongoing

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

Media of Concern: Soil and groundwater

Site Location: Grid H5, FGGM 90 comprises 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 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 (DOL Laundry and Dry Cleaning Services) 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 a propane storage pen (Building 2247A), a flammable gas storage pen (Building 2248A), an empty compressed gas storage pen north of Building 2249, and a former 1,000-gallon AST storing No. 2 fuel oil located behind Building 2242, 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, and currently is a receiving/transfer location for computer equipment and laundry/dry cleaning. 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 furniture storage.

Current Status: An RI is being performed.

Cleanup/Exit Strategy: Please refer to OU-4 for a discussion of the exit strategy.

2.1.15.6 FGGM 91 – Former Missile Repair Shop

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA/SI 1998-1999

Sampling Visits .....1999 and 2000

SBCR 2001

RI.....ongoing

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

Media of Concern: Soil and groundwater

Site Location: Grid H5, FGGM 91, the former missile repair shop is located approximately 300 feet east 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 seperately. The FGGM 45 designation is for the building, 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 and analyzed for Building 2220.

Soil: 1 concentration of lead (6.1 mg/kg) exceeded its Soil Background Concentration Report (SBCR; USACE, 2001c) value (3.58 mg/kg). No other contaminants of concern were identified.

Groundwater: TPH-DRO was detected in groundwater samples at concentrations ranging from 160µg/L to 1,700µg/L. Several total metals were detected at elevated concentrations; however, this was attributed to turbid samples collected from temporary (undeveloped) well points. Dissolved arsenic, copper, iron, and manganese exceeded Tap Water RBCs. VOCs, SVOCs, PCB/pesticides.

Current use: The building onsite (Building 2220/SWMU 42) is currently used for an electronic maintenance and calibration shop.

Current Status: An RI is being performed.

Cleanup/Exit Strategy: Please refer to OU-4 for a discussion of the exit strategy.

2.1.15.7 FGGM 92 – Former Heavy Gun Cleaning and Repair Shop

Regulatory Driver: CERCLA

Previous Environmental Investigations

Site Investigations..... 1999, 2000, and 2001

Delineation Report 2005

RI ..... ongoing

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

Media of Concern: Soil and groundwater

Site Location: Grid H5, located 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 (SWMUs 55–58), Building 2253 (SWMUs 61–62), and two storage sheds (Buildings 2244 and 2245). Building 2246 has been 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 was 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 a 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 At Building 2253, 2 investigations were conducted at the site (CH2M HILL, 1999; Versar, 2001k).

At Building 2246, 2 investigations conducted at the Building 2246 site (Versar, 1999hh and 2000g)

Soil and groundwater samples were collected and analyzed for both buildings.

Current use: Industrial use

Current Status: An RI is being performed.

Cleanup/Exit Strategy: Please refer to OU-4 for a discussion of the exit strategy.

2.1.15.8 FGGM 49 (OU-23) – DOL, Buildings 2286 and 2246

Regulatory Driver: CERCLA

Previous Environmental Investigations

Initial Delineation Report..... 2000

RI.....ongoing

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

Media of Concern: Soil and groundwater

Site Location: Grid H5, located north of Morrison Street and east of Huber Street, respectively.

Site Description: FGGM 49 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. The Initial Delineations of these 2 buildings were completed (Versar, Inc., 2000c and 2000b). Further actions are required for soil and groundwater and will be conducted under FGGM 86 (for Building 2286) and FGGM 92 (for Building 2246). FGGM 49 is part of OU-4.

Current use: Industrial use.

Current Status: An RI is being performed.

Cleanup/Exit Strategy: Please refer to OU-4 for a discussion of the exit strategy.

2.1.15.9 Monitoring Wells 125d and 126d

Regulatory Driver: CERCLA

Previous Environmental Investigations

Site Investigation 2004

Sampling Visits 2004, 2005, 2008, and 2009

Work Plan..... 2009

RI.....ongoing

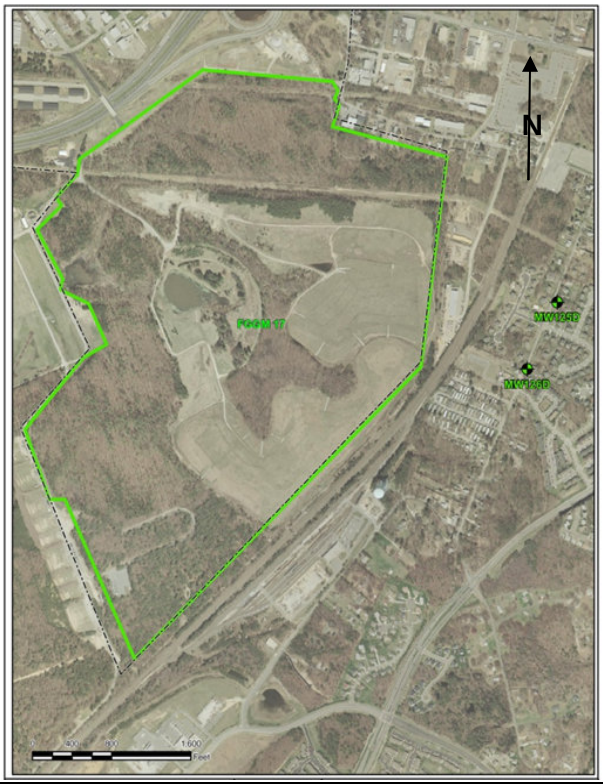
Contaminants of Potential Concern: PCE, CCl_4 and metals

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 Patuxent and Dovetail roads in Odenton, Maryland in a residential area.

Site Description: MW-123s/125d and MW-124s/126d were installed as part of the CSL RI. An RI determined that the CSL is not the source of contamination in the Lower Patapsco Aquifer. In March 2005, Anne Arundel County Health Department began an annual drinking water sampling program which included 13 residential drinking water wells downgradient from the CSL. Not all the same wells were sampled annually due to changes in home ownership and some homeowners elected not to participate in the program. The program continues and to date all samples collected have met primary EPA drinking water standards. Copper was detected above MCL's, lead was detected above its at-tap action level, but no VOC exceedances from the wells tested by Anne Arundel County.

Previous Studies: MW123s/125d and MW124s/MW126d were sampled in 2004, 2005, 2008, and 2009.



Current use: Monitoring wells.

Current Status: An RI is being performed.

Cleanup/Exit Strategy: Please refer to OU-4 for a discussion of the exit strategy.

2.1.16 FGGM 51 (OU-24) – Building 2217 (spill site)

Regulatory Driver: CERCLA

Previous Environmental Investigations

MDE Inspection Report.....1988

SWMU Study 1996

MDE Site Closeout.....2000

PA/SI.....2010-2012

Contaminants of Potential Concern: Soil

Media of Concern: Metals, PAHs, and VOCs

Site Location: Grid H5, Building 2217 (spill site) was located in the southeastern portion of the installation, west of the intersection of Chisholm Avenue and 2nd Street.

Site Description: Two heating oil USTs were located 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 was 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. 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, six surface soil samples and 17 subsurface soil samples were collected and submitted for laboratory analysis.

The soil COPCs driving the risk are chromium, thallium, and 2-methylnaphthalene. Chromium and thallium appears to be consistent with background. The 2- methylnaphthalene risk is driven by a hot spot in Boring 3.

PCE was also noted in two TCLP samples, this indicates that some amount of PCE (a non-petroleum solvent) was also present in the soil.

Current use: Grass field.

Current Status: A PA/SI is underway with a recommendation to collect 3 subsurface soil samples and analyze for VOCs and SVOCs..

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.17 FGGM 70 (OU-25) – Indoor Range, Building 6513 (SWMU 150)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Historic Aerial Photograph Study 1996

Sampling Visit 2000

SI 2001

PA/SI 2010-2012

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil and groundwater

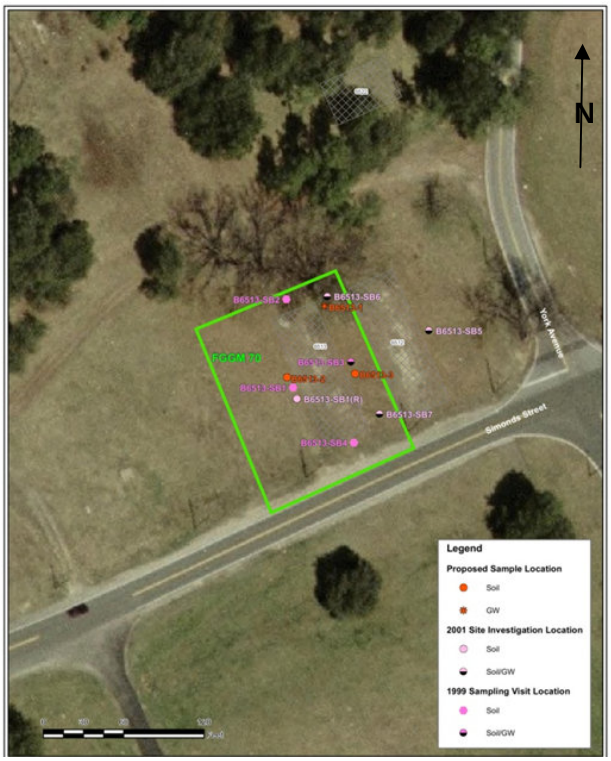
Site Location: Grid F4, Former Building 6513 was located in the southern portion of the installation, on the northwest corner of the intersection of York Avenue and Simonds Street.

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 by BCM 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).

Former building 6513 was demolished in 2001.

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.



Current use: A grass field covers this AOI.

Current Status: A PA/SI is underway with a recommendation to collect three surface soil samples to be analyzed for metals, install one groundwater monitoring well, collect and analyze the groundwater sample for VOCs and SVOCs.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.18 FGGM 71 (OU-26) – EX Indoor Shooting Range, Building 6522

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Historic Aerial Photograph Study.....1996

Sampling Visits 2000

PA/SI.....2010-2012

Contaminants of Potential Concern: metals

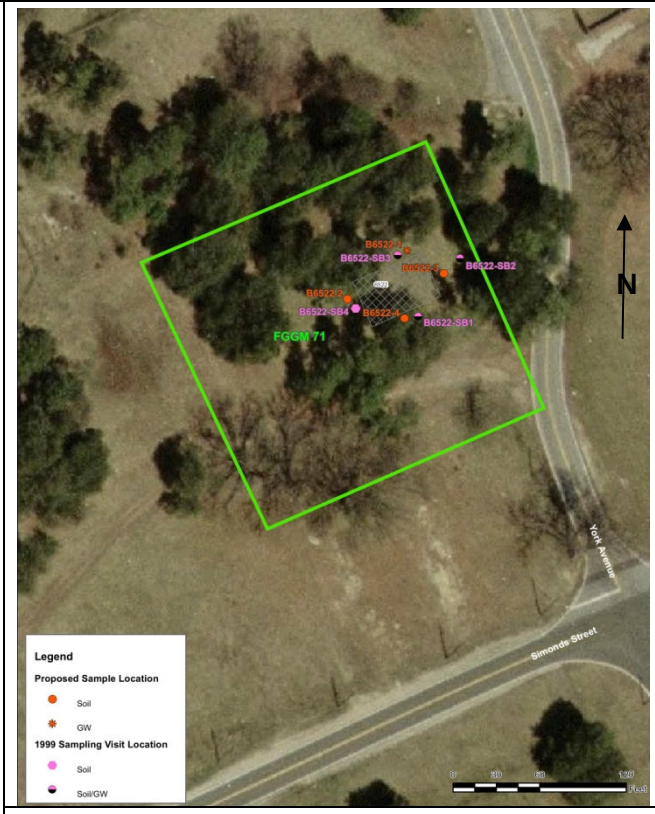
Media of Concern: Soil and groundwater

Site Location: Grid F4, Former Building 6522 was located in the southern portion of the installation, 100 feet west of the northwest corner of York Avenue and Simonds Street.

Site Description: Building 6522 (SWMUs 151-152) 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).

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 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.



Current use: Grass and trees cover this AOI.

Current Status: A PA/SI is underway with a recommendation to collect three surface soil samples, install one groundwater monitoring well, collect and analyze the soil and groundwater samples for metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.19 FGGM 74 (OU-29) – Architect of the Capitol

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Phase I site assessment 1994

RI .....ongoing

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

Media of Concern: Groundwater, surface water, and soil

Site Location: Grid G5/H5, FGGM 74 is the USAOC parcel located in an area along the south border of Fort. This AOI is situated generally between State Route 32 and Rock Avenue and between Taylor and Pepper Roads.

Site Description: This area was authorized by Congressional action for transfer in 1993 from the Department of the Army to the USAOC to accommodate long term storage and service needs of the Library of Congress (LOC) and other Legislative Branch agencies. Contamination on the USAOC parcel is due to past Army activities. This area was evaluated in 1994 for feasibility of development for the needs of the Legislative Branch agencies. At the time of the study, the area contained a temporary warehouse area, buildings formerly used as the Fort commissary, and buildings associated with the TMP facility. 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 VOC, pesticide, PCB, and metals contamination in the DRMO area. The assessment also identified petroleum hydrocarbon contamination 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.

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

Current Status: An additional lead delineation study is in progress to determine the extent of lead contaminated soils on this property. There are no other COCs and the RI will be finalized based on this study.

Cleanup/Exit Strategy: An FS will be developed that will assess remedies for the lead issues associated with soils. No Action, LUCs, and removal will all be evaluated.

2.1.20 FGGM 75 (OU-30) – Underground Storage Tanks Prior to 1984

Regulatory Driver: CERCLA

Previous Environmental Investigations

ER,A 2008

UST Facility Summary 2010

PA/SI..... 2010-2012

Contaminants of Potential Concern: Gasoline, diesel fuel, and oil

Media of Concern: Soil

Site Location: Underground Storage Tanks prior to 1984 were located throughout the installation.

Site Description: In July 1985, the EPA promulgated 40 CFR 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 overfill 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 base under the jurisdiction of FGGM DPW. All seven USTs have been installed after 1984.

Previous Studies: Numerous samples were collected throughout the time the USTs were closed out. Results were presented to MDE with closeout documents.

No image available - these are multiple sites throughout the installation.

Current Use: The sites of the former USTs are used for installation support functions.

Current Status: The MDE has no open UST cases with FGGM DPW. The current PA/SI recommends no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.21 FGGM 83 (OU-1) – Former Trap and Skeet Range

Regulatory Driver: CERCLA

Previous Environmental Investigations

EBS 1998
SRS and Risk Assessment .. 1999 and 2008
CSA 1999-2000
Corrective Action Plan..... 2002
SI 2004
Supplemental Testing Proposal..... 2007
HHRA..... 2009
RI 2010

Contaminants of Potential Concern: PAHs and metals

Media of Concern: Sediment, soil, and surface water

Site Location: Grid H2, located 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 recreational former 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 man-made pond (KEMRON, 2008l). The former range consisted of a firing line, skeet houses, and a man-made 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.

Current use: The site is currently a vacant parcel of 66 acres.

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.

Cleanup/Exit Strategy: Future work includes final resolution of the USEPA and MDE comments on the RI Report, preparing a Final RI Report and preparing an FS.

2.1.22 FGGM 87 (OU-3) – Former Nike Control Site

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996
Site Investigation..... 2000
Delineation Report 2000
CEMP 2005
RI/FS..... 2008
Final Screening Level Ecological RA.... 2009
Final Addendum to SWP 2010

Contaminants of Potential Concern: VOCs, SVOCs, PAHs, TCE, BEHP, and metals

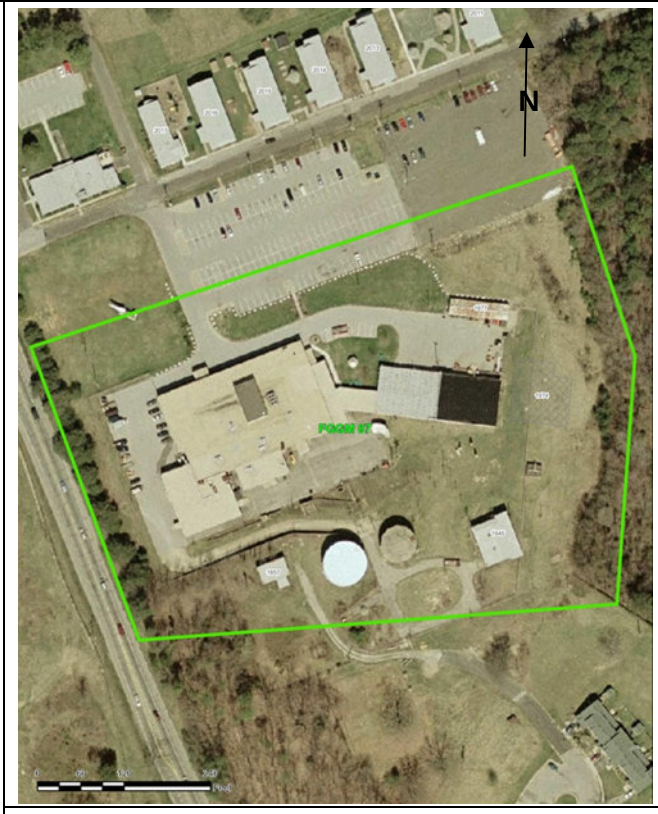
Media of Concern: Soil, groundwater, and indoor air

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 4 buildings that supported the former Nike missile fire control site from 1955 to 1972.

- Building 1974 was demolished in the 1990s.
- Existing Buildings 1976 and 1978 are one-story, concrete block, warehouse type structures, connected to each other by a narrow hallway.
- Building 1978 (SWMU 24) provided storage of small quantities of hazardous materials.
- Building 1977 (SWMU 23) provided storage for 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.



Current use: Building 1976 (SWMU 22) is used as a supply warehouse to store electronic equipment and computers. Building 1978 (SWMU 24) provides administrative support. Building 1977 is used for metal storage.

Current Status: The Army's contractor completed soil and groundwater sampling and analysis at the site in 2009 to address USEPA and MDE comments on the January 2008 Draft Final RI/FS. Sediment sampling and analysis was conducted adjacent to the site in 2010 to address further USEPA comments. A Revised RI Report was submitted for USEPA and MDE review in May 2011.

Cleanup/Exit Strategy: Future work includes resolution of any regulatory comments on the Draft Final RI Report, and development of a Revised FS.

2.1.23 FGGM 93 (OU-36) – Manor View Dump

Regulatory Driver: CERCLA

Previous Environmental Investigations

EBS 2002
PA/SI..... 2003
RI/FS..... 2003-2012
IRA..... 2005-2012
NTCRA 2011-2012
RA (C)..... 2007-2008
RA (O)..... 2008-2023

Contaminants of Potential Concern: Metals, PAHs. Methane represents a safety hazard.

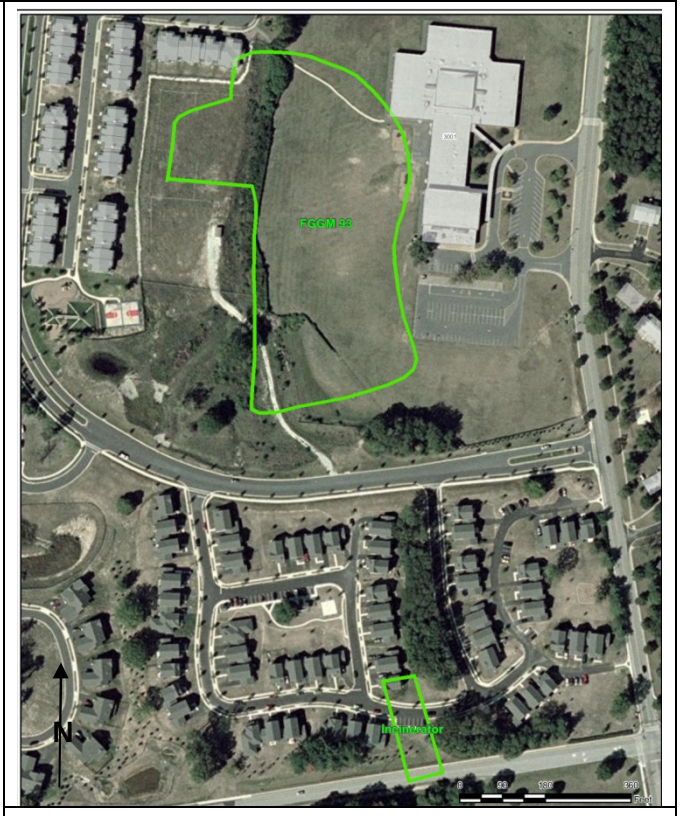
Media of Concern: Groundwater, soil, and soil gas

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 (Chatillion Street), 2nd Corps Boulevard to the south, Jones Drive to the west, and MacArthur Road to the east. The land developed at the dump site is referred to as Parcel B, and it 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 on the property adjacent to the Manor View Elementary School (2900 MacArthur Road).

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

The area of buried waste was temporarily fenced with barricade safety fencing and then 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).



Current use: The Manor View Elementary School remained open during the RI (URS, 2008), but outdoor activities were temporarily suspended. Today the school is operating normally.

Current Status: The extraction system is operated continuously. The residents of Hayden and Phelps Avenues in the Potomac Place Neighborhood were relocated in December 2005, and the houses remain vacant.

Cleanup/Exit Strategy: A NTCRA is planned for 2011/12 to remove the methane generating wastes at this site. An FS will be developed to evaluate the remaining issues.

2.1.24 FGGM 95 (OU-45) – Former Landfill Sites

2.1.24.1 Possible Dump Site A – 1957

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

Geophysical Investigation 2004

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified.

Media of Concern: None identified.

Site Location: Grid G1, Possible Dump Site A was located 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 (1996) study of the base 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 (1996) study did not identify stained soils or stressed vegetation in this area in any of the historic aerial photographs.

Previous Studies: A geophysical investigations 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 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 doesn't appear to be much indication that something is buried here (Versar, 2004).

Current use: Wooded

Current Status: The current PA/SI recommends no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.24.2 Possible Dump Site B – 1957

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study 1996

Geophysical Investigation 2004

PA/SI 2007

PA/SI 2010-2012

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 was found at this AOI, but no drums were observed.

Previous Studies: A geophysical investigation (Versar, 2004a) revealed 2 areas of elevated terrain conductivity and numerous significant metal anomalies located throughout the AOI. The GPR profiles indicated disturbed soil to a depth of at least 5 ft.

The 2007 PA/SI included 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.

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

Current Status: A PA/SI is underway with a recommendation to collect one subsurface sample for dioxins analysis, install two monitoring wells, and collect groundwater samples for metals analysis.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.24.3 Site 1957E

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study 1996

Geophysical Survey..... 2004

PA/SI 2007

PA/SI 2010-2012

Contaminants of Potential Concern: Metals and dioxins.

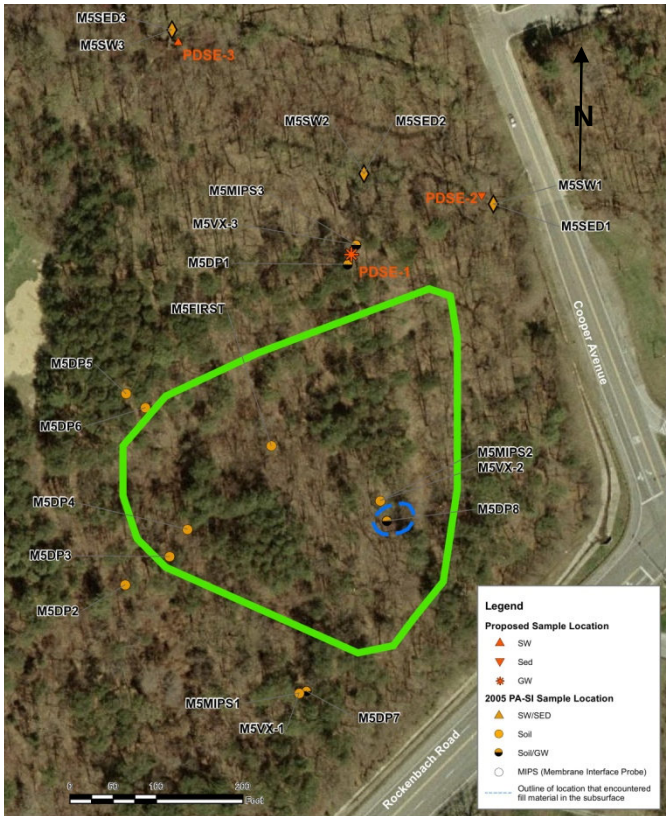
Media of Concern: Groundwater, sediment, and soil.

Site Location: Grid F2, Possible Dump Site E-1957 was located in the northern portion of the installation, northwest 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 photographic 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 1957E showed erratic, lower intensity signals, nothing consistent enough to signify extensive buried material (Versar, 2004). During the geophysical investigation, rusted 55-gallon drums, tires, and construction debris were found within 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, 5 subsurface soil samples, 4 groundwater samples, 3 sediment samples, and 3 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.



Current use: This AOI is currently forested.

Current Status: A PA/SI is underway with a recommendation to collect one soil sample and analyze for dioxins, collect one sediment and one surface water sample and analyze both for metals, install one groundwater monitoring well and analyze the groundwater sample for metals

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.24.4 Possible Dump Site G – 1957

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

Geophysical Survey.....2004

PA/SI.....2010-2012

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid E5, in the southwest portion of the installation, just north 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).

Current use: Trees and grass cover this AOI.

Current Status: A PA/SI is underway with a recommendation to collect four subsurface soil samples and analyze for VOCs, SVOCs, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.24.5 Possible Dump Sites – 1970

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study 1996

PA/SI 2010-2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid E2, Possible Dump Sites-1970 was located in the northwest portion of the installation, near the Baltimore-Washington Parkway

Site Description: Possible Dump Sites – 1970 was identified as an AOI because the EPA (1996) historic aerial photographic study of the base listed "Possible Dump Location" at this location 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.

Previous Studies: There has been no previous sampling or geophysical investigations at this AOI.

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.

Current use: Wooded

Current Status: The current PA/SI recommended no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.24.6 Site M Parcel 1

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study..... 1996

Geophysical Investigation 2004

EBS 2004

PA/SI.....2007

PA/SI.....2010-2012

Contaminants of Potential Concern: VOCs, metals, and explosives

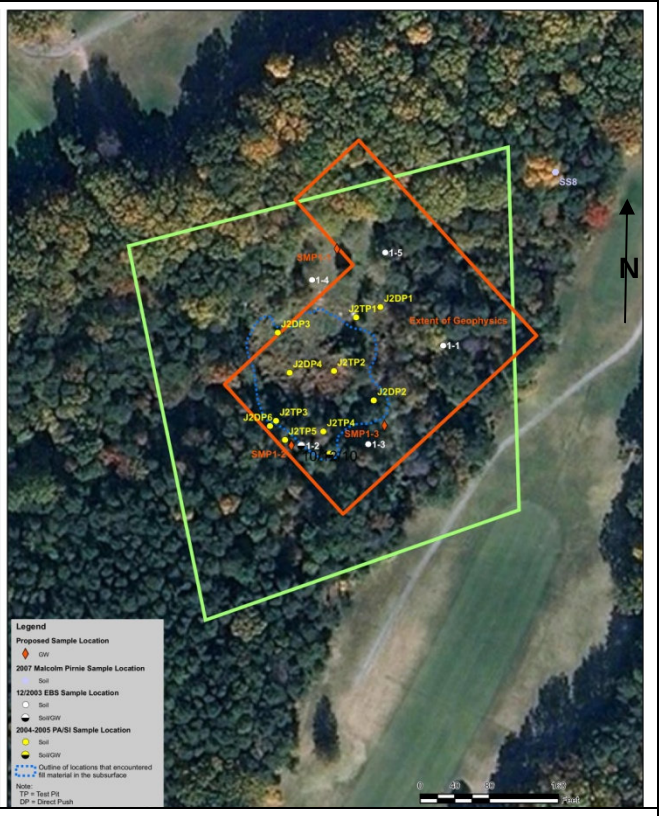
Media of Concern: Groundwater

Site Location: Grid F3, Site M Parcel 1 is located in the 8800 Block, south of the green for hole 6B on the Fort Meade Golf Course, which is located in the western-central portion of the installation.

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.



Current use: Golf Course

Current Status: A PA/SI is underway with a recommendation to install three groundwater monitoring wells and analyze groundwater samples for VOCs, metals, and explosives

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.24.7 Site M Parcel 2

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study..... 1996

EBS 2004

Geophysical Survey 2004

PA/SI.....2007

PA/SI.....2010-2012

Contaminants of Potential Concern: VOCs, metals, herbicides, pesticides, explosives, PAH, furans, and dioxins

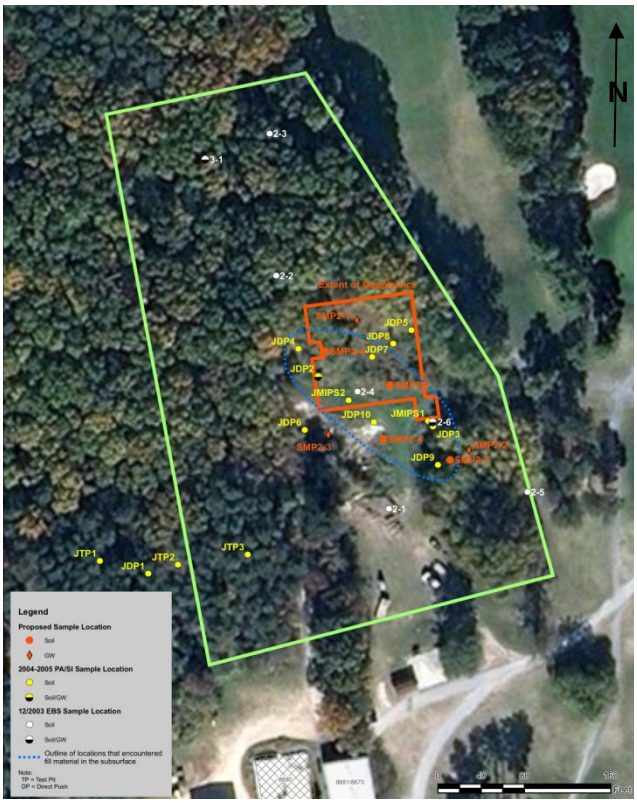
Media of Concern: Soil and groundwater

Site Location: Grid F3, Site M Parcel 2 is located in the 8800 Block, near the tee for hole 11B on the golf course.

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.



Current use: Golf Course

Current Status: A PA/SI is underway with a recommendation to collect four surface soil samples to be analyzed for VOCs, metals, herbicides, pesticides, explosives, PAH, furans, and dioxins; collect four subsurface soil samples to be analyzed for metals, PAH, furans, and dioxins; install three groundwater monitoring wells, collect and analyze groundwater samples for VOCs, metals, explosives, furans, and dioxins.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.24.8 Site M Parcel 3 Golf Course Maintenance Facilities, SWMUs 131-137

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study..... 1996

SWMU Study 1996

EBS 2004

Geophysical Survey 2004

PA/SI.....2007

PA/SI.....2010-2012

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil and groundwater

Site Location: Grid F3, Site M Parcel 3 is located within the golf course complex, west of Zimborski Ave.

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 1970's. 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 with a well which distributes treated effluent water from the sanitary sewer to the sprinkler system for the 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 that is used to store hazardous waste awaiting disposal. There is also a storage shed/rollaway (no building number) located 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, eight surface soil samples; 35 subsurface soil samples; and ten 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: Golf course maintenance.

Current Status: A PA/SI is underway with a recommendation to collect one subsurface soil sample to be analyzed for SVOCs and metals; install two groundwater monitoring wells, collect and analyze groundwater samples for VOCs.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.24.9 Site M Parcel 7

Regulatory Driver: CERCLA

Previous Environmental Investigations

EBS 2004

PA/SI.....2007

PA/SI.....2010-2012

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

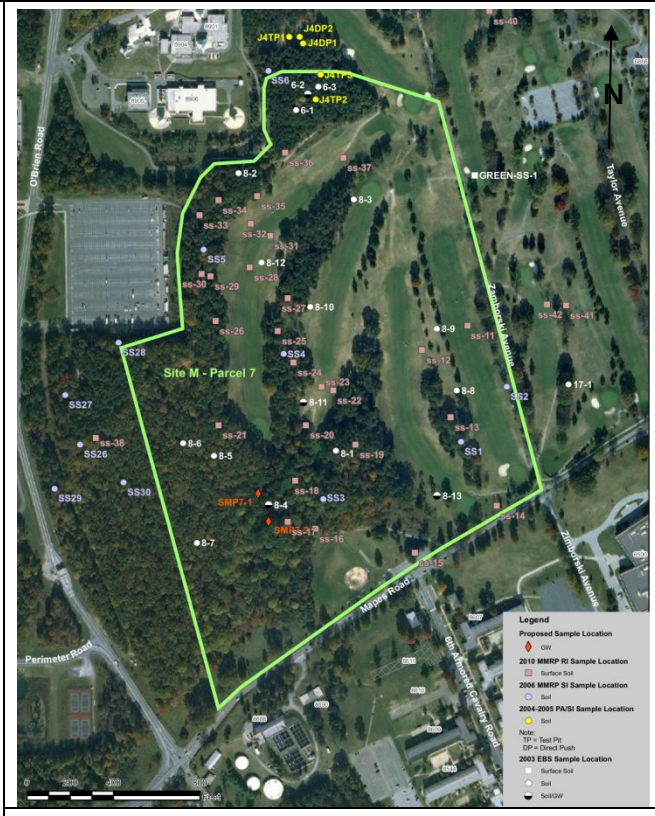
Media of Concern: Groundwater

Site Location: Grid F4, located in the central-western portion of the installation, in the 8800 Block, in the southwest portion of the Applewood Golf Course, west of the fairway for hole 13B.

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 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 separately. The foldout map showing 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 4 duplicate surface soil samples), 21 subsurface soil samples, and 4 groundwater samples (plus 1 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.



Current use: Golf Course and wooded area.

Current Status: A PA/SI is underway with a recommendation to install two groundwater monitoring wells and analyze groundwater samples for VOCs, SVOCs, metals, pesticides, and explosives. Development of the area near the former ball field is also planned.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.24.10 Site M Parcel 8

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

EBS 2004

PA/SI.....2007

PA/SI.....2010-2012

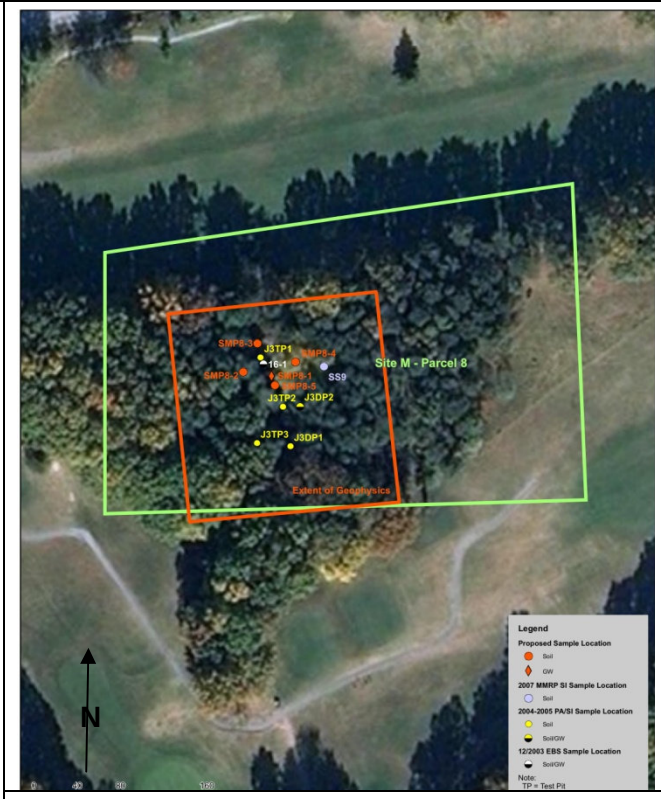
Contaminants of Potential Concern: metals

Media of Concern: Soil and groundwater

Site Location: Grid F3, located in the 8800 Block, in the wooded area in the northwest corner of the golf course surrounded by fairways 5B, 6B, and 7B in the western-central portion of the installation.

Site Description: This location was identified in the EBS because a possible dump was identified at this location during a review of a 1938 aerial photograph (Berger EA, 2004).

Previous Studies: Over the course of previous investigations at this site, one surface soil sample, six subsurface soil samples, and two groundwater samples (one total metals and one dissolved metals) were collected and analyzed at this site. 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.



Current use: Golf Course

Current Status: A PA/SI is underway with a recommendation to collect five surface soil samples to be analyzed for metals; install one groundwater monitoring well, collect and analyze the groundwater sample for metals. The center soil sample will be analyzed with 7 day turnaround so that if elevated metals are detected, the other four soil samples can be analyzed in order to delineate this AOI.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.24.11 Inactive Landfill 4

Regulatory Driver: CERCLA

Previous Environmental Investigations

SI 1992

Sampling Visit 1992

Historic Aerial Photograph Study 1996

RI 1998

PA/SI 2010-2012

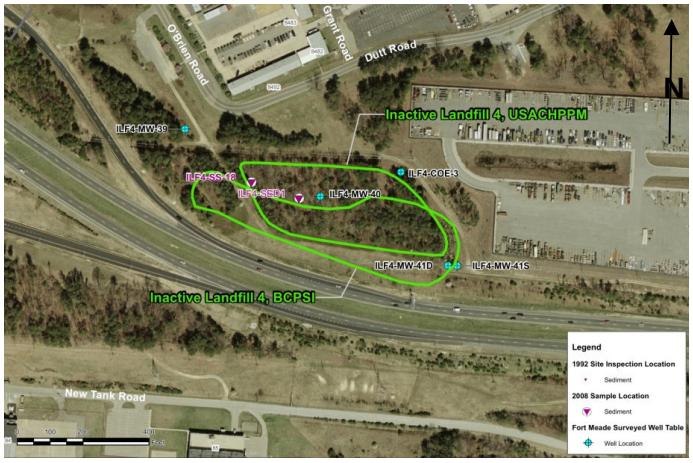
Contaminants of Potential Concern: VOCs, SVOCs, pesticides, PCBs, and metals

Media of Concern: Groundwater 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 in size. 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 located within current installation boundaries, it was 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 sediment sample) 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.



Current use: None, primarily a wooded area.

Current Status: The current PA/SI recommends characterization of the landfill.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.24.12 Pre-WWII Laundry

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

RI 2007-2011

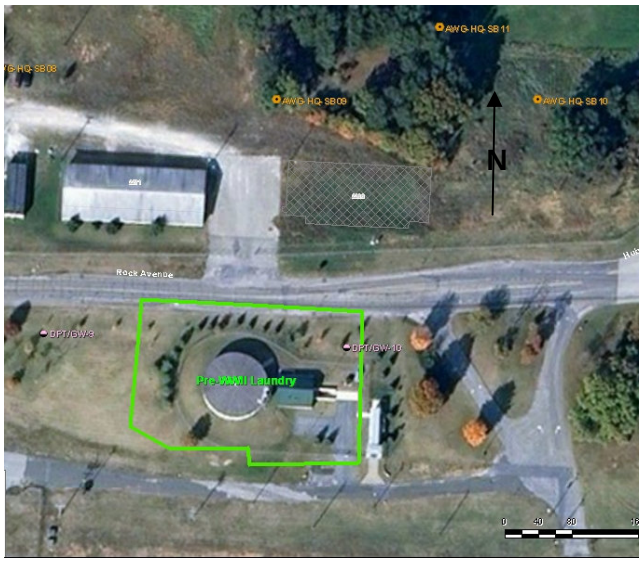
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H5, The Pre-WWII Laundry Facility was located in the southern portion of the installation, on the northern boundary of the United States Architect of the Capitol (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 in the southern portion of the installation. The laundry was also identified on a circa 1917 map of Camp Meade (Maryland Geological Survey [MGS], 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 USEPA 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 (USEPA 1996) at this AOI.

Previous Studies: Two Geoprobe™ borings (DPT/GW9 and DPT/GW10) were advanced near this site in 2007. Soil and groundwater grab samples were collected. Arsenic was detected in surface and subsurface samples at concentrations above industrial and residential RSLs, but below background concentrations for Fort Meade. Iron, lead, vanadium and zinc were detected in water samples collected from DPT/GW9 at concentrations above RSLs for tap water. In 2010, two closely spaced wells (MW102s and MW101d) were installed just east of the site. Monitoring wells MW102s and MW101d were sampled in 2010 and volatile organics, most notably tetrachloroethene, were detected at 3.82 micrograms per milliliter (ug/l) and 139 ug/l, respectively.



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

Current Status: All relevant data pertaining to this site will be reported in the upcoming RI/FS for OU4.

Cleanup/Exit Strategy: This AOI will be included in the OU4 study.

2.1.24.13 Taylor Avenue Buried Drum Site

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

Geophysical Survey 2007

SI 2007

PA/SI.....2010-2012

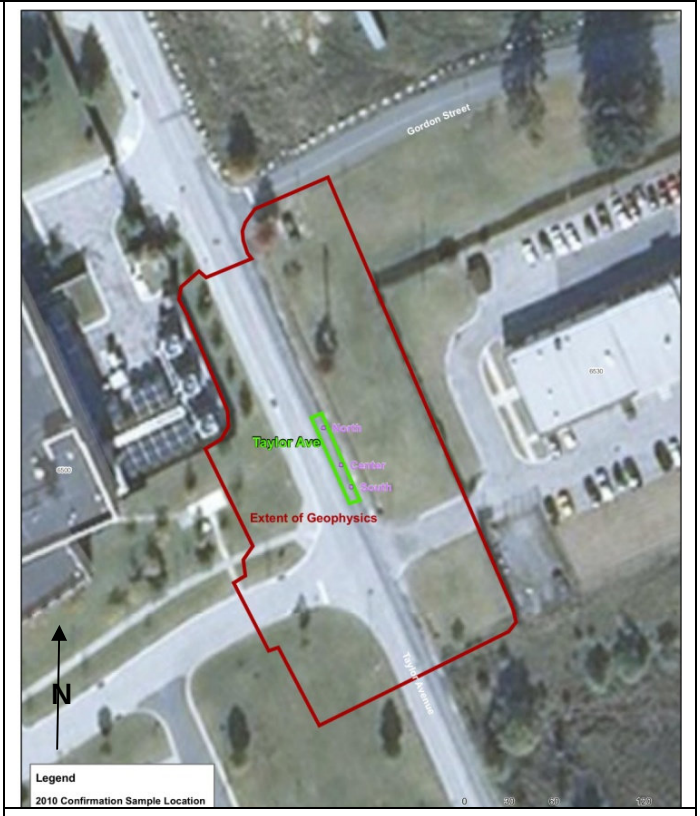
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F4, The Taylor Avenue Buried Drum Area of Interest was located in the south-central portion of the installation, approximately 150 feet south of the intersection of Taylor Avenue and Gordon Street.

Site Description: Taylor Avenue Buried Drum Area of Interest was identified as an AOI on February 24, 2006, while mapping a gas line for Baltimore Gas & Electric (BGE), Soft Dig crews discovered a buried drum along Taylor Avenue. The drum was located between building 6500, the Defense Information School (DINFOS), 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.



Current use: Roadways and grass fields cover this AOI.

Current Status: The current PA/SI recommends no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.24.14 Waste Storage/Disposal Area – 1938

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010

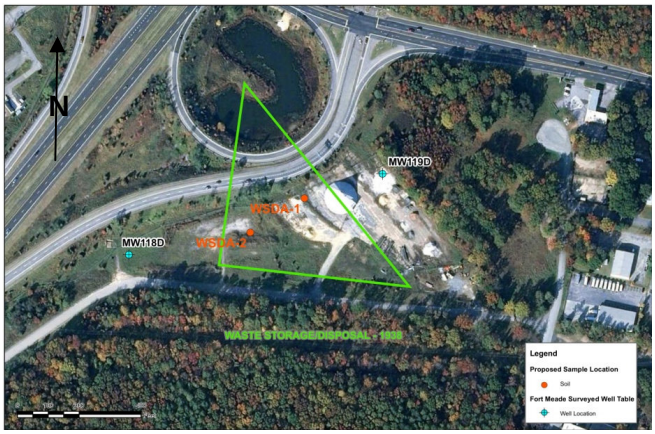
Contaminants of Potential Concern: VOCs, SVOCs, and metals.

Media of Concern: Soil

Site Location: Grid I5, Waste Storage/Disposal Area – 1938 was located 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 photographic study of the installation did not identify this AOI until 1943.

Previous Studies: The EPA (1996) aerial photographic 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. In 1943, a building and vehicles are observed at the AOI. 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."*



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

Current Status: A PA/SI is underway with a recommendation to collect two subsurface soil samples to be analyzed for VOCs, SVOCs, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.24.15 Fill–1988

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

Contaminants of Potential Concern: VOCs, SVOCs, and metals

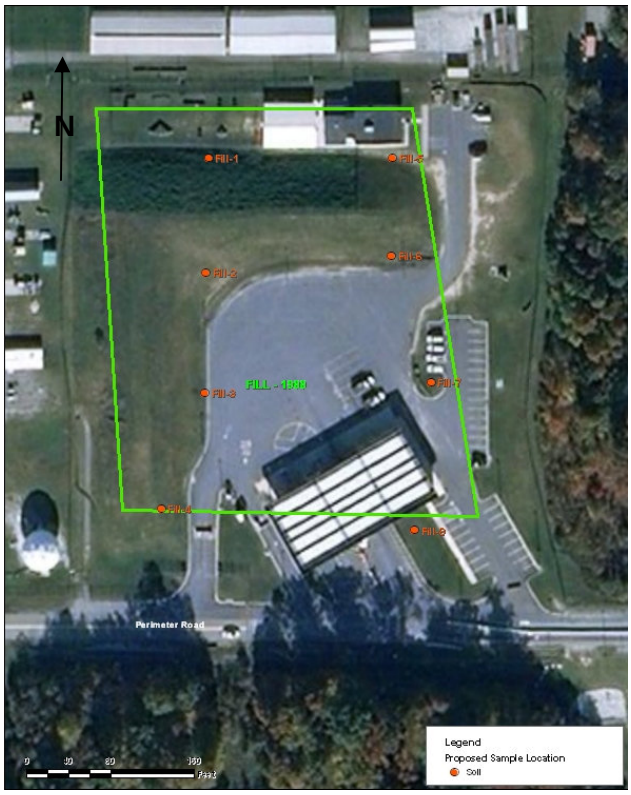
Media of Concern: Soil

Site Location: Grid E4, Fill-1988 is located 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) study of the base 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 the 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. This AOI is on land leased by the NSA.

Previous Studies: No previous sampling was undertaken.



Current use: Unknown, parking lot, and grass areas cover this AOI.

Current Status: A PA/SI is underway with a recommendation to collect eight subsurface soil samples and analyze for VOCs, SVOCs, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.24.16 Small Pit – 1952

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study 1996

PA/SI 2007

PA/SI 2010

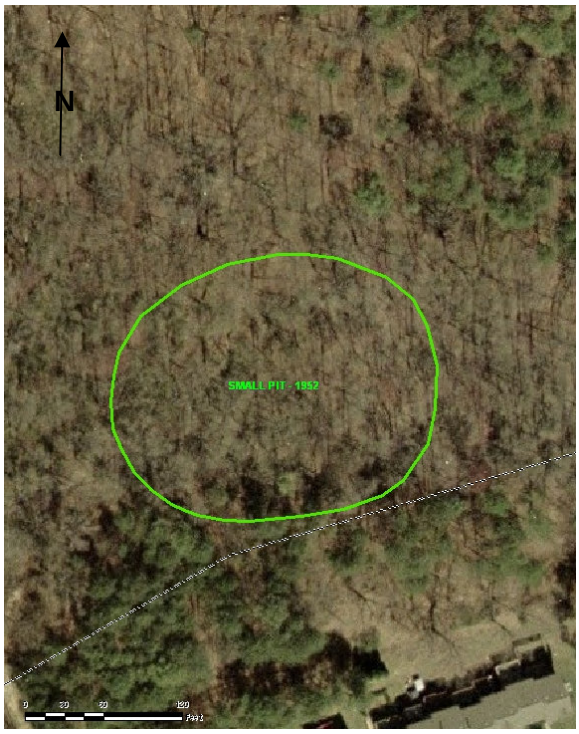
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Small Pit-1952 was located in the northeast portion of the installation, east of Forrest Avenue.

Site Description: Small Pit-1952 was identified as an AOI because the EPA (1996) historic aerial photographic 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 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, 2007b), 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.



Current use: Wooded

Current Status: The current PA/SI recommended no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.25 FGGM 96 (OU-46) – Former Motor Pools, Wash Racks, and Buildings

2.1.25.1 Former Motor Pool-1 (MP-1) and Wash Rack-4 (WR-4)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

Contaminants of Potential Concern: VOCs, SVOCs, and metals

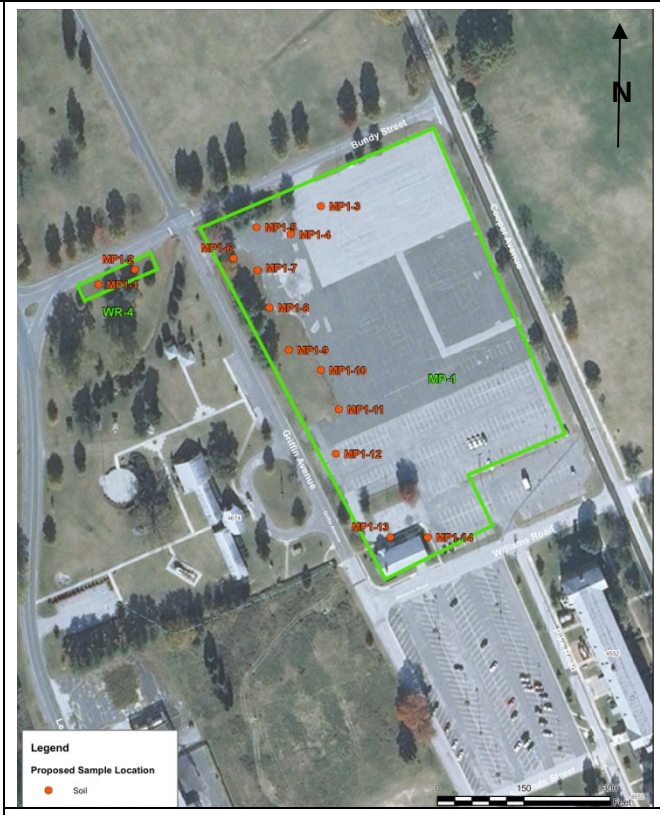
Media of Concern: Soil

Site Location: Grid G4, Former MP-1 and WR-4 were located in the south-central portion of the installation, in the 4600 Block of Fort Meade, 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 the circa 1952 land use map (Anon, 1952) listed them in the south-central portion of the installation. 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 (MP) and for washing cars (WR) for a limited time period. 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.



Current use: Parking lot and grassy area.

Current Status: A PA/SI is underway with a recommendation to collect 14 surface soil samples to be analyzed for VOCs, SVOCs, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.2 Motor Pool-2 (MP-2)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

Soil and Groundwater Quality Investigation.....2009

PA/SI.....2010-2012

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

Media of Concern: Soil and groundwater

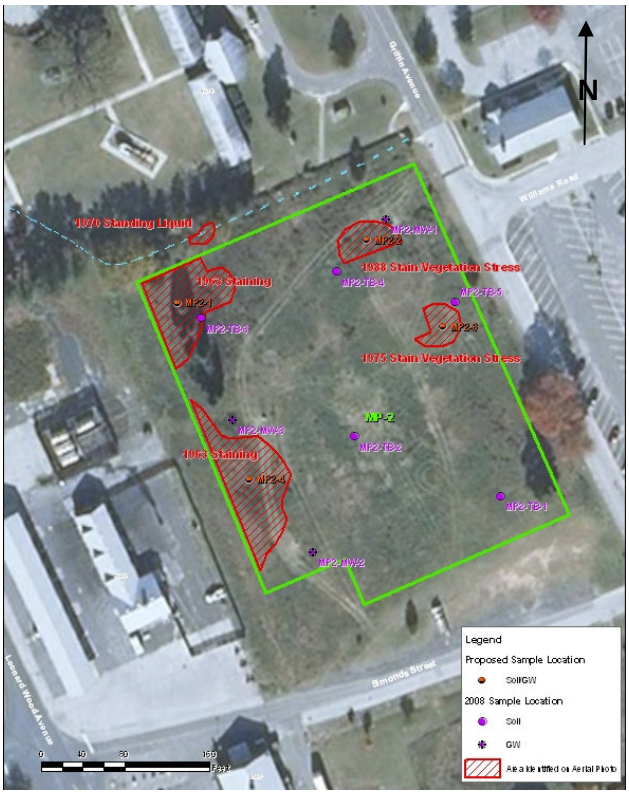
Site Location: Grid G4, MP-2 was located in the south central portion of the installation, west of Griffin Avenue and north of Simonds Street.

Site Description: MP-2 was identified as an AOI because the circa 1952 land use map (Anon, 1952) listed it in the south-central portion of the Base. 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 vegetation stress 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 vegetation stress.

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 ground-water 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.



Current use: None

Current Status: A PA/SI is underway with a recommendation to collect 4 surface soil samples, install 4 groundwater monitoring wells and analyze soil and groundwater samples for VOCs, SVOCs, TPH-GRO, TPH-DRO, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, either the site will require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.3 Former Motor Pool-3 (MP-3) and Wash Rack-2 (WR-2)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid F4, Former MP-3 and WR-2 were located in the 6400 Block of Fort Meade, 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 the circa 1952 land use map (Anon, 1952) listed them in the southern portion of the Base. 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 (motor pool) and for washing cars (wash rack) for a limited time period. The potential for contamination in this area is minimal. It is unknown if vehicles were serviced at any of the former buildings at this AOI. All buildings have been removed and the soils have been excavated/graded.

Previous Studies: No previous sampling was conducted at this AOI.

Current use: Parking lot with grassy areas surrounding it.

Current Status: A PA/SI is underway with a recommendation to collect 13 surface soil samples and analyze for VOCs, SVOCs, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.4 Former Motor Pool-4 (MP-4)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2011

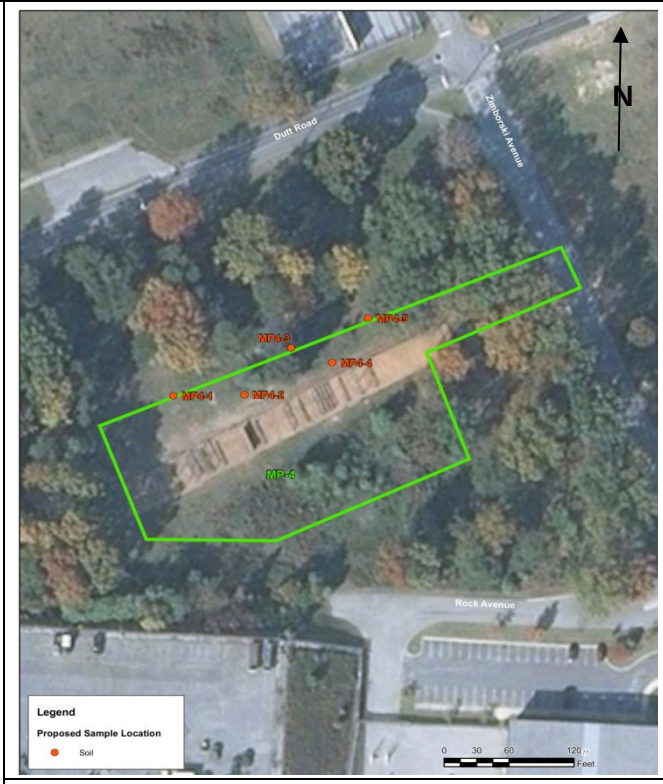
Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid F5, Former MP-4 was located in the southern portion of the installation, in the 6300 Block of Fort Meade, south of Dutt Road, west of Zimborski Avenue.

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

Previous Studies: No previous sampling was conducted at this AOI.



Current use: MP-4 is currently a grassy area with several trees along the edges of the AOI.

Current Status: A PA/SI is underway with a recommendation to collect five surface soil samples and analyze for VOCs, SVOCs, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.5 Former Motor Pool-5 (MP-5)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

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

Media of Concern: Soil and groundwater

Site Location: Grid G5, MP-5 was located in the southern portion of the Base, south of Broadfoot Road and east of Taylor Avenue.

Site Description: MP-5 was identified as an AOI because the circa 1952 land use map (Anon, 1952) listed MP-5 in the southern portion of the Base. 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, 1952, 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: No previous sampling was undertaken at this AOI.

Current use: Grassy field and trees.

Current Status: A PA/SI is underway with a recommendation to collect two surface soil samples and analyze for VOCs, SVOCs, TPH-DRO and TPH-GRO, and metals; collect two subsurface soil samples and analyze for SVOCs, TPH and metals; install two groundwater monitoring wells and analyze groundwater samples for VOCs, SVOCs, metals TPH-DRO, and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.6 Former Motor Pool-6 (MP-6)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

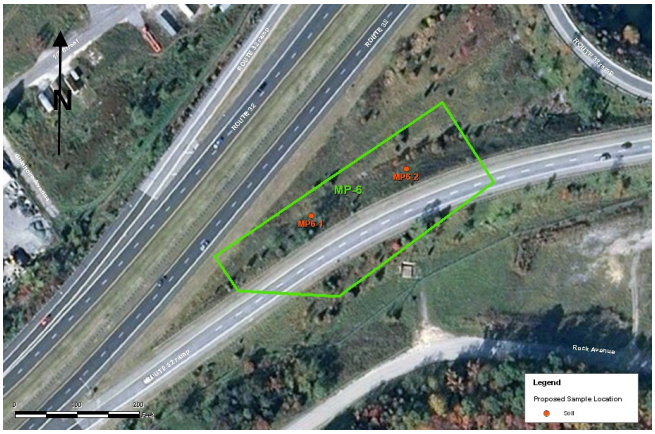
Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid H5, Former MP-6 was located in the southeastern portion of the Base, at the State Route 175/32 interchange.

Site Description: MP-6 was identified as an AOI because the circa 1952 land use map (Anon, 1952) listed it in the south-eastern portion of the installation. According to the 1952 map, there are no buildings located within the outline of this MP. Building 111, however, was located on the north-eastern edge of this AOI. This AOI was not identified in the EPA (1996) historic aerial photograph study of the base. Since there were no former buildings at this AOI, it is unknown and unlikely that vehicles were serviced at this AOI. All surrounding buildings have been removed by 1993 and the soils have been excavated/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: No previous sampling was undertaken.



Current use: MP-6 is currently a grassy area and part of State Route 175/32 interchange.

Current Status: A PA/SI is underway with a recommendation to collect two surface soil samples and analyze for VOCs, SVOCs, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.7 Motor Pool-7 (MP-7) and Wash Rack-6 (WR-6)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2007

PA/SI.....2010-2012

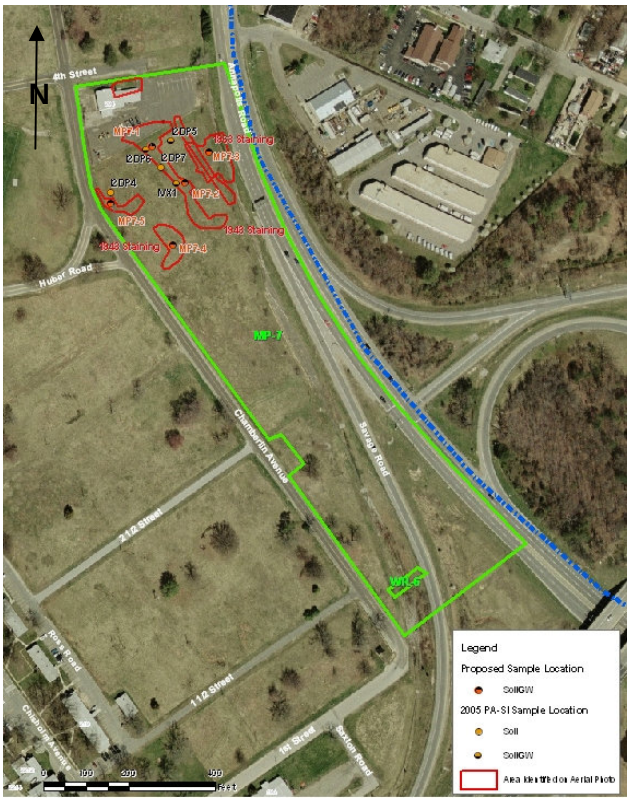
Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO.

Media of Concern: Soil and groundwater

Site Location: Grid H4/5, MP-7 and WR-6 were located in the southeastern portion of the Base, northeast of Chamberlain Avenue, southwest of State Route 175, southeast of 4th Street, and northwest of State Route 32. SWMU 10 - Building 294 is located 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.



Current use: Building 294 and a grass field occupy this AOI.

Current Status: A PA/SI is underway with a recommendation to sample soil and groundwater in the areas of past staining. Six surface soil samples will be collected and analyzed for VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO. Two subsurface soil samples will be collected and analyzed for metals. Five groundwater monitoring wells will be installed and groundwater samples will be collected and analyzed for VOCs, total metals, dissolved metals, TPH-DRO, and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.8 Former Motor Pool-8 (MP-8)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

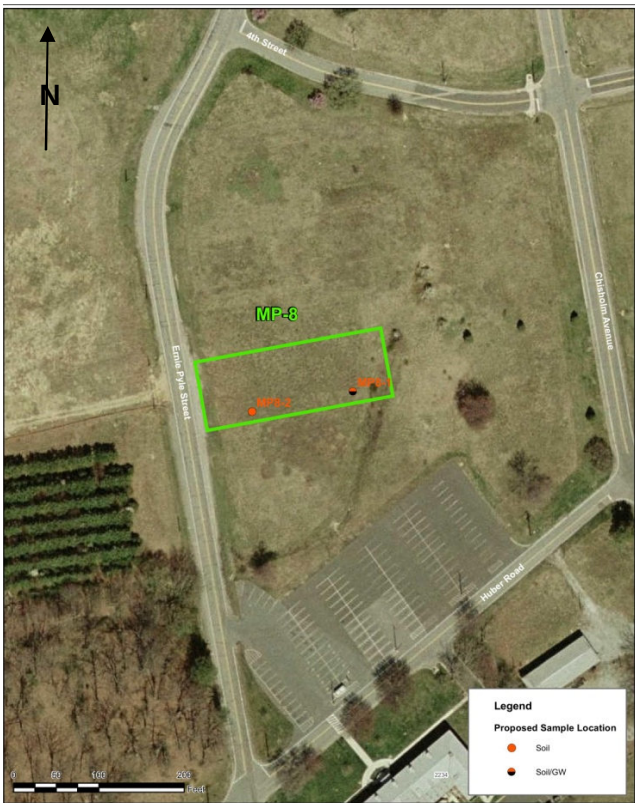
Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H4, Former MP-8 was located in the southeastern portion of the Base, in the 2200 Block of Fort Meade, 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 the circa 1952 land use map (Anon, 1952) listed it in the southeastern portion of the Base. 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 covered 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: No previous sampling was undertaken. The EPA (1996) study did not identify stained soils or stressed vegetation at this location.



Current use: This AOI is a grass field.

Current Status: A PA/SI is underway with a recommendation to collect two surface soil samples, install one groundwater monitoring well, and analyze soil and groundwater samples for VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.9 Motor Pool-9 (MP-9)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2007

PA/SI.....2010-2012

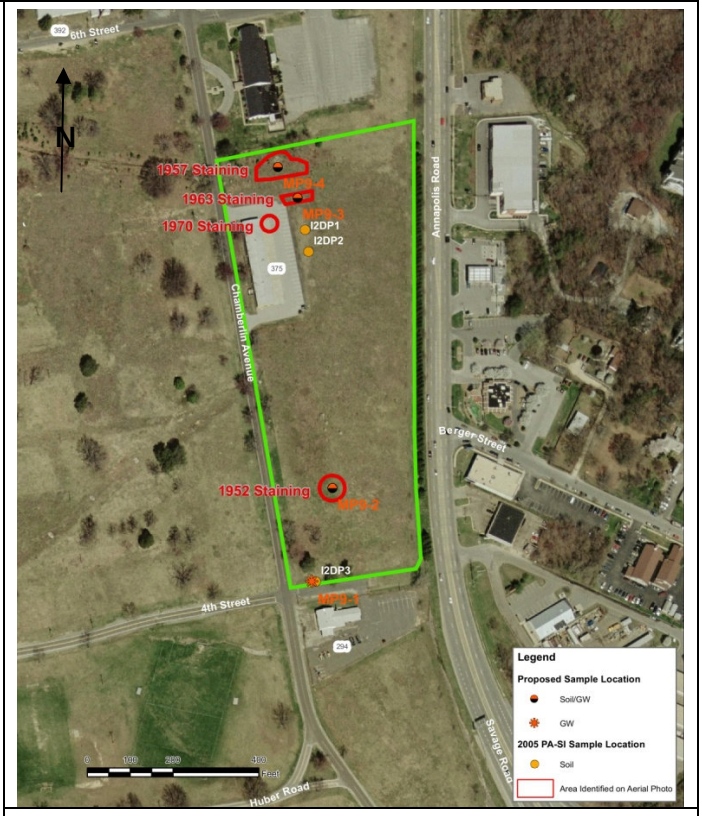
Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H4, MP-9 was located in the eastern portion of the Installation, east of Chamberlain Avenue, west of State Route 175, halfway between 6th Street and 4th Street 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, 4 subsurface soil samples and 2 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.



Current Use: Building 375 and a grass field occupy this AOI.

Current Status: A PA/SI is underway with a recommendation to sample soil and groundwater in the areas of past staining. Three surface soil, three subsurface soil and four groundwater samples (from four new groundwater monitoring wells) will be collected and analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.10 Former Motor Pool-10 (MP-10)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

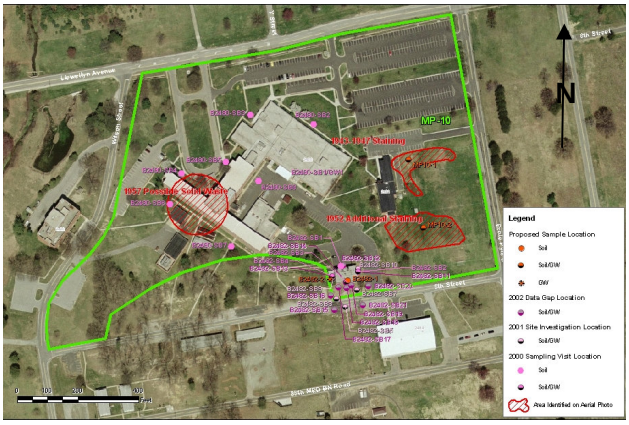
Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil and groundwater

Site Location: Grid H4. Former MP-10 was located in the southeastern portion of the Base, 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 the circa 1952 land use map (Anon, 1952) listed MP-10 in the southeastern portion of the Base. 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 the1938 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 has been converted into the Kimbrough Army Community Hospital. As part of the investigations of Buildings 2480 and 2482, soil and groundwater samples have been collected within the outline of MP-10. Previous samples are discussed under Buildings 2480 and 2482.



Current Use: Kimbrough Army Community Hospital, parking lots, and grass areas occupy this AOI.

Current Status: A PA/SI is underway with a recommendation to sample soil and groundwater in the areas of past staining. Two soil and two groundwater samples (from two new groundwater monitoring wells) will be collected and analyzed for VOCs, SVOCs, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.11 Motor Pool-11 (MP-11) and Wash Rack-7 (WR-7)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

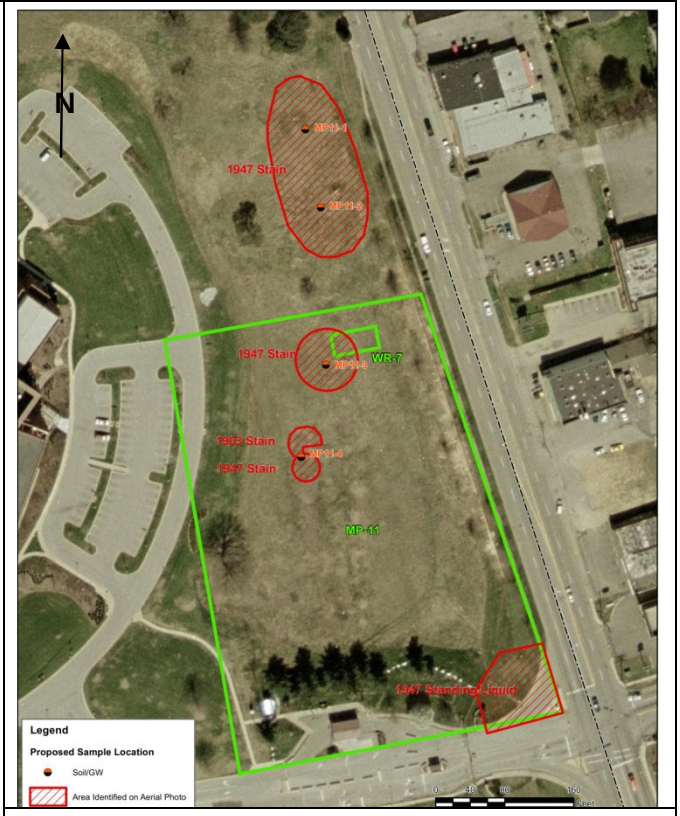
Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H3. MP-11 and WR-7 were located in the eastern portion of the Base, 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 the circa 1952 land use map (Anon, 1952) listed them in the eastern portion of the Base. 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 has been no previous sampling at this AOI.



Current Use: None, this AOI is an open field.

Current Status: A PA/SI is underway with a recommendation to sample soil and groundwater in the areas of past staining. Four soil and four groundwater samples (from four new groundwater monitoring wells) should be collected and analyzed for VOCs, SVOCs, metals, TPH-DRO and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.12 Motor Pool-12 (MP-10) and Wash Rack-8 (WR-8)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

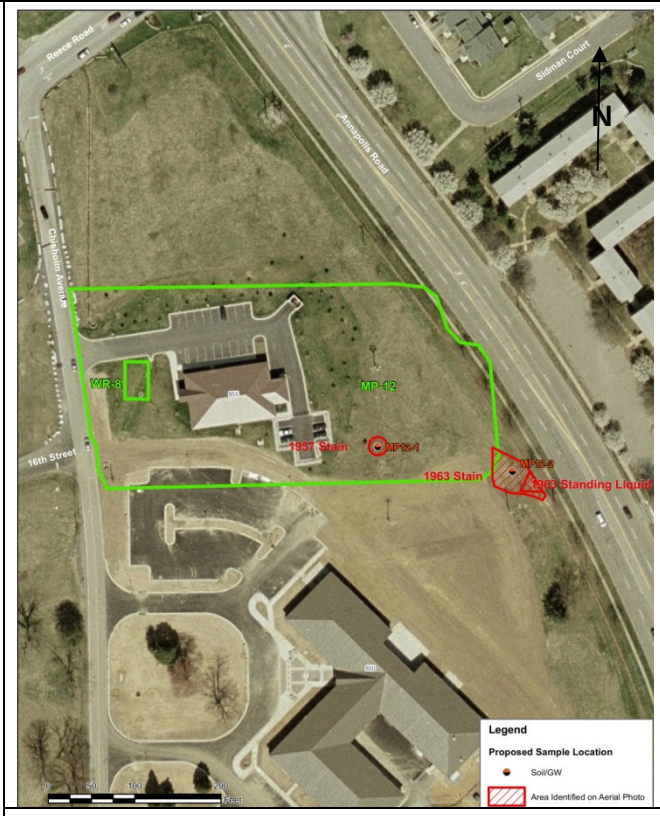
Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H3. MP-12 and WR-8 were located in the eastern portion of the Base, 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 the circa 1952 land use map (Anon, 1952) listed this AOI in the eastern portion of the Base. 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 has been no previous sampling at this AOI.



Current Use: Unknown. Building 855 and a grassy area currently occupy this AOI.

Current Status: A PA/SI is underway with a recommendation to sample soil and groundwater in the areas of past staining. Two soil and two groundwater samples (from two new groundwater monitoring wells) should be collected and analyzed for VOCs, SVOCs, metals, TPH-DRO and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.13 Motor Pool-13 (MP-13) and Wash Rack-9 (WR-9)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

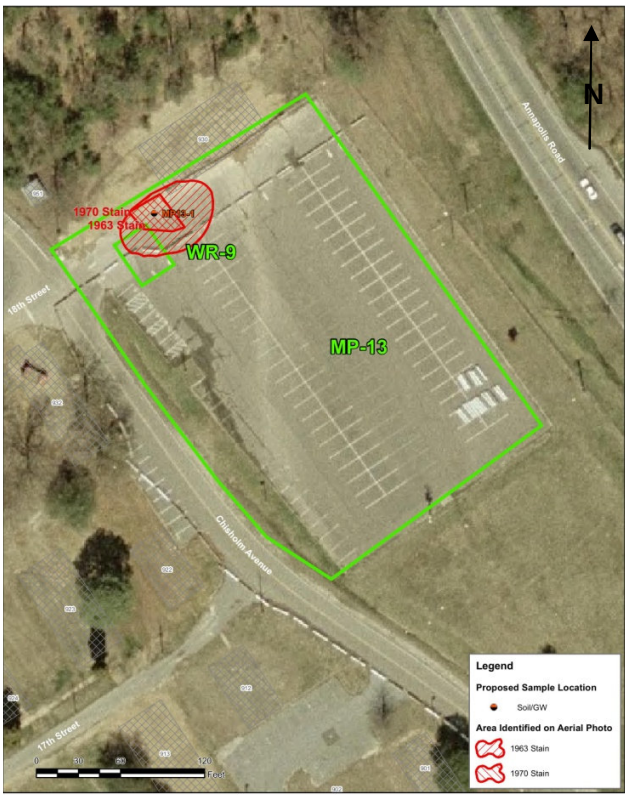
Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H2. MP-13 and WR-9 were located in the northeastern portion of the Base, 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 the circa 1952 land use map (Anon, 1952) listed them in the north-eastern portion of the installation. 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 has been no previous sampling at this AOI.



Current Use: Parking lot

Current Status: A PA/SI is underway with a recommendation to sample soil and groundwater in the area of past staining. One soil and one groundwater sample (from one new groundwater monitoring well) should be collected and analyzed for VOCs, SVOCs, metals, TPH-DRO and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.14 Motor Pool-14 (MP-14)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

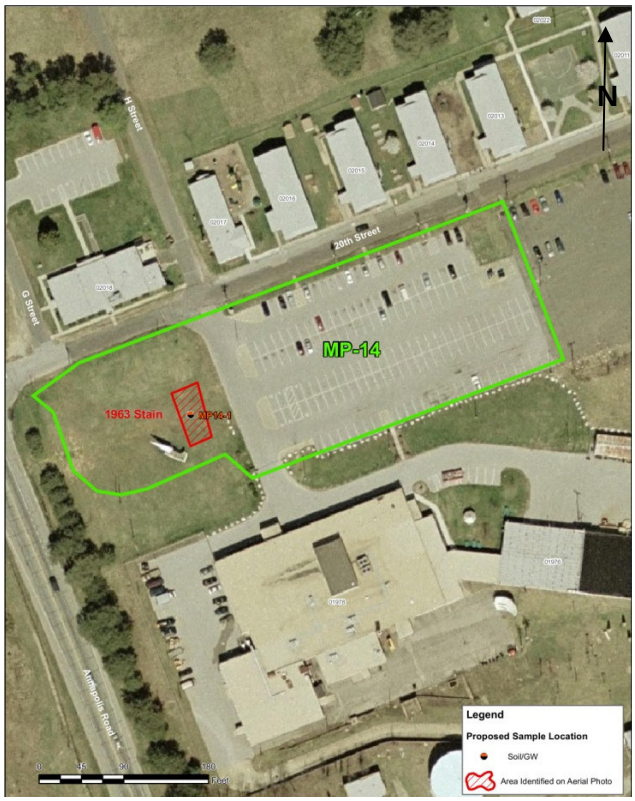
Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H2. MP-14 was located in the northeastern portion of the Base, east of State Route 175 and south of 20th Street.

Site Description: MP-14 was identified as an AOI because the circa 1952 land use map (Anon, 1952) listed it in the northeastern portion of the Base. 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 portion 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 has been no previous sampling at this AOI.



Current Use: Parking Lot and grass field.

Current Status: A PA/SI is underway with a recommendation to sample soil and groundwater in the area of past staining. One soil and One groundwater sample (from one new groundwater monitoring well) should be collected and analyzed for VOCs, SVOCs, metals, TPH-DRO and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.15 Motor Pool-17

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

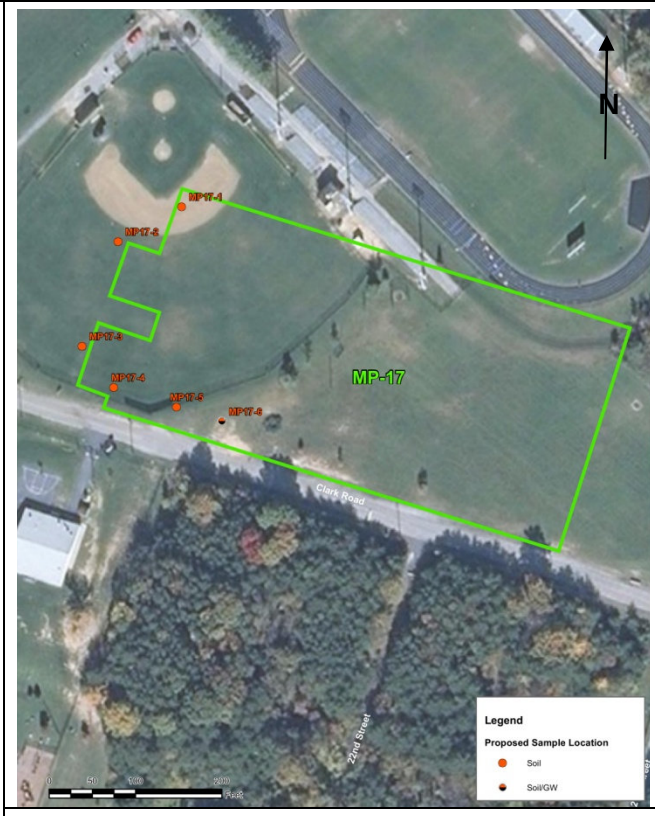
Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid G2. MP-17 was located in the northeastern portion of the Base, north of Clark Road, east of Macarthur Road, and west of 21st Street.

Site Description: MP-17 was identified as an AOI because the circa 1952 land use map (Anon, 1952) listed MP-17 in the northeastern portion of the Base. 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 has been no previous sampling at this AOI.



Current Use: Ball field and grassy area.

Current Status: A PA/SI is underway with a recommendation to collect six soil samples install one groundwater monitoring well. Both soil and groundwater samples will be analyzed for VOCs, SVOCs, metals TPH-DRO, and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.16 Motor Pool-18 and Wash Rack-12

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

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

Media of Concern: Soil and groundwater

Site Location: Grid G2. MP-18 and WR-12 were located in the northern portion of the Base, south of Ernie Pyle Street, at Fryar Loop.

Site Description: MP-18/WR-12 was identified as an AOI because the circa 1952 land use map (Anon, 1952) listed them in the northern portion of the Base. 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. Vegetation stress is noted in the 1952 aerial photograph. Also, a runoff pattern was noted in the 1957 aerial photograph. The runoff pattern and vegetation stress in the area were not present in subsequent historic aerial photographs.

Previous Studies: No previous sampling was undertaken.

Current Use: This AOI is developed with buildings and parking areas.

Current Status: A PA/SI is underway with a recommendation to sample soil and groundwater in the areas of past staining. Four soil and four groundwater samples (from four new groundwater monitoring wells) should be collected and analyzed for VOCs, SVOCs, metals, TPH-DRO and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.17 Former Motor Pool-19 and Wash Rack-13

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

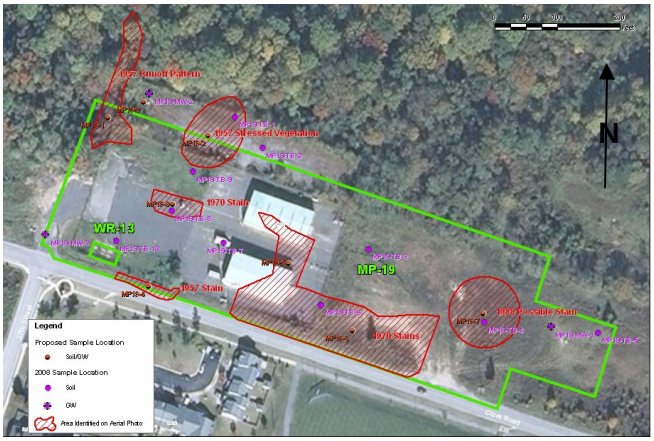
Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid G2. MP-19 and WR-13 are in the northern portion of the Base, 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 the circa 1952 land use map (Anon, 1952) listed them in the northern portion of the Base. 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, arsenic and chromium elevate the risk numbers above the site-specific action levels.



Current Use: Buildings, parking areas, and a grass field occupy this AOI.

Current Status: A PA/SI is underway with a recommendation to sample soil and groundwater in the areas of past staining. Seven soil and seven groundwater samples (from seven new groundwater monitoring wells) should be collected and analyzed for VOCs, SVOCs, metals, TPH-DRO and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.18 Former Wash Rack-3

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

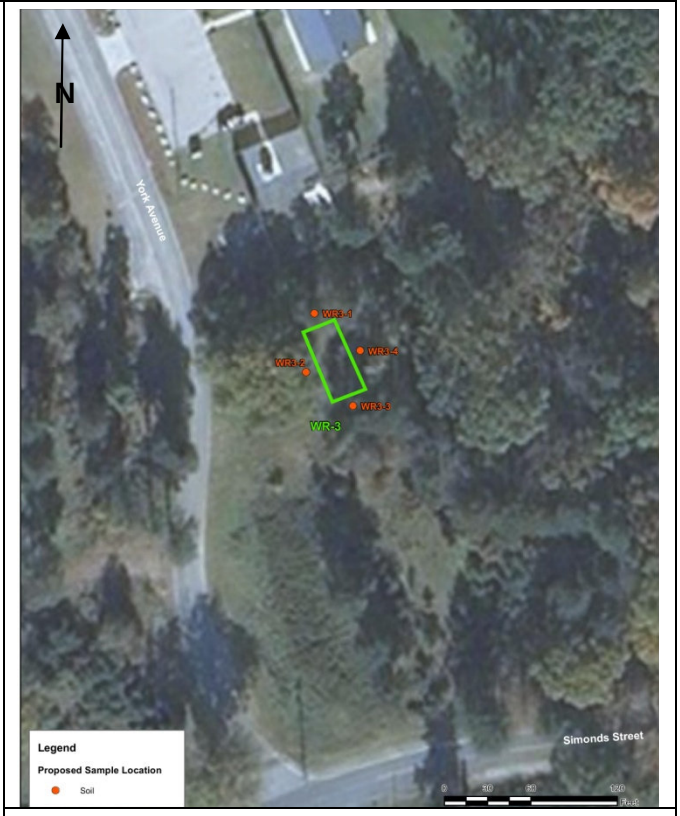
Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid F4, Former WR-3 was located in the southern portion of the installation, north of Simonds Street and east of York Avenue.

Site Description: This wash rack was probably used for washing cars. Chemicals potentially used at this wash rack may have included soap and car wax. Neither this wash rack 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 wash rack. Access to WR-3 appears to be from York Avenue or along a path leading from Building 6507.

Previous Studies: The wash rack 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 were identified on any aerial photographs. There was no previous sampling for this AOI.



Current Use: Trees occupy this AOI.

Current Status: A PA/SI is underway with a recommendation to collect four surface soil samples and analyze for VOCs, SVOCs, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.19 Wash Rack 5

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

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 south-eastern portion of the installation, north of Morrison Street and east of Wilson Street.

Site Description: WR-5 was identified as an AOI because the circa 1952 land use map (Anon, 1952) listed WR-5 in the southeastern portion of the installation. The 1996 SWMU study identifies a WR-5 associated with Building 940 located in the north-eastern portion of the installation. The circa 1952 land use map (Anon, 1952) did not identify a WR in the vicinity of Building 940. The naming of WRs in 1952 and 1996 may have been different. The WR associated with Building 940 will be addressed under separate cover in the report of Building 940. Area of interest WR-5 falls within the general area of OU-4; however, it is not part of the OU-4 Performance-Based Contract. Groundwater in this region is being studied as part of OU-4.

Previous Studies: Over the course of previous investigations, three subsurface soil samples and one groundwater sample were collected. Based on a risk analysis of the analytical results, arsenic, iron, cobalt, vanadium, aluminum, chloroform, and chromium elevate the risk numbers above the site-specific action levels.

Current Use: Parking lot

Current Status: A PA/SI is underway with a recommendation to collect one soil sample, install one groundwater monitoring well, and analyze soil and groundwater samples for VOCs, SVOCs, metals TPH-DRO, and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.20 Former Oil/Water Separator (SWMU 143) and Wash Rack (SWMU 144)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Historic Aerial Photograph Study.....1996

RFA 3rd Phase.....1999

SI 2001

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified

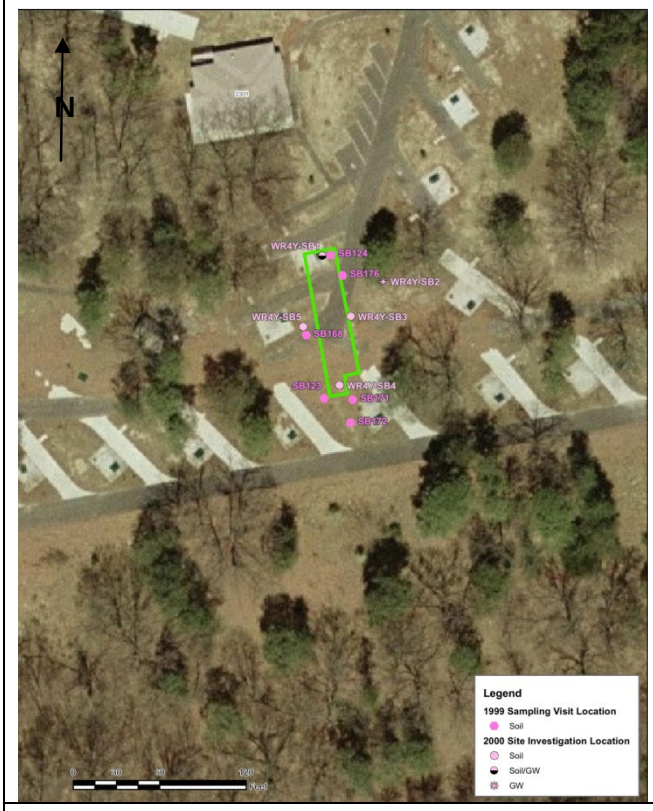
Media of Concern: None identified

Site Location: Grid H4, SWMUs 144 and 143 were located in the southeastern portion of the installation, northwest of the intersection of 4th Street and Y Street.

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 during washing of 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 was comprised of a concrete-lined WR and associated OWS, and was demolished and removed in 1999. Prior to its removal, the WR is believed to have been used to wash military vehicles and equipment.

Previous Studies: There were no spills or reported releases 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.



Current Use: Roadways and grassy areas.

Current Status: The current PA/SI recommended no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.25.21 Debris and Stain – 1975

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

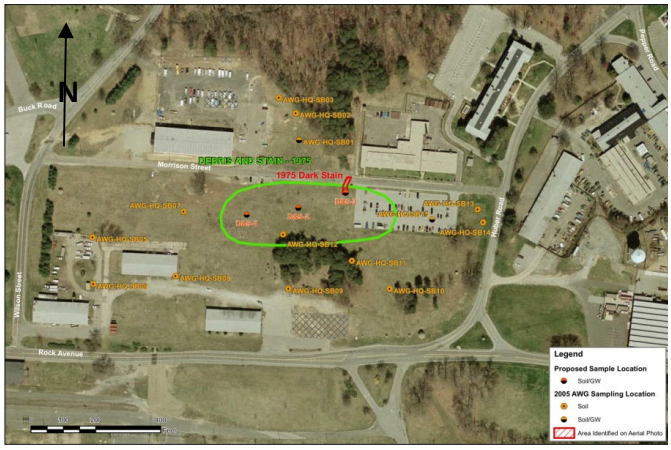
Contaminants of Potential Concern: VOCs, SVOCs, metals.

Media of Concern: Soil and groundwater

Site Location: Grid H5, The Debris and Stain - 1975 AOI was located 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 general outline 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 1975 aerial photograph (EPA, 1996) does not have the stain labeled. The write-up for the 1988 aerial photograph (EPA, 1996) indicates that staining is still present along the drainage way and solid waste is present in an accumulation of debris, although these feature 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. Based on a risk analysis of the analytical results, arsenic, cobalt, iron, manganese, and chromium elevate the risk numbers above the site-specific action levels.



Current Use: Grass field and parking lot.

Current Status: A PA/SI is underway with a recommendation to collect three surface and three subsurface soil samples, install three groundwater monitoring wells, collect three groundwater samples, and analyze the soil groundwater samples for VOCs, SVOCs, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.22 Chisholm Ave and 6th Street

Regulatory Driver: CERCLA

Previous Environmental Investigations

Site Assessment 2010

PA/SI.....2010-2012

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

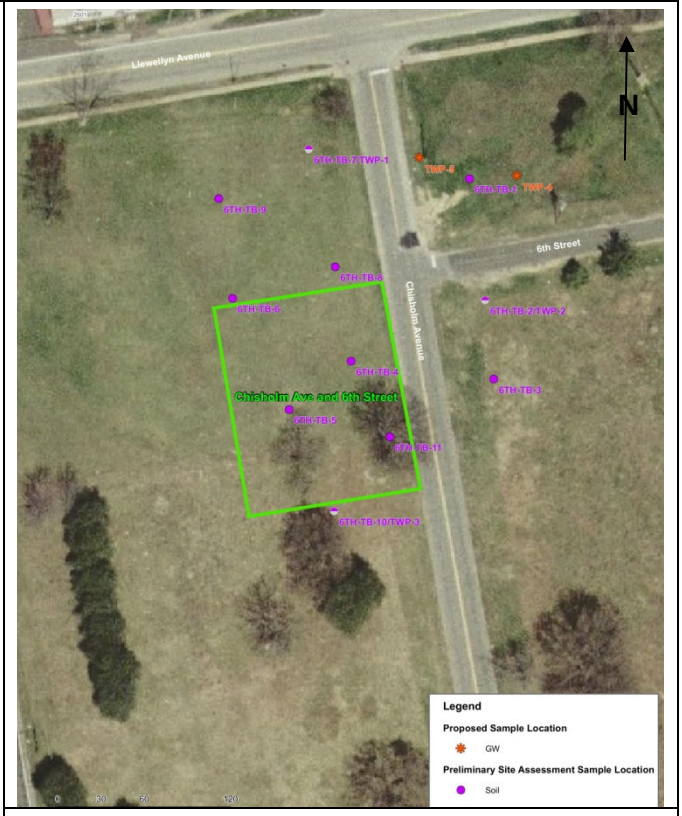
Media of Concern: Soil and groundwater

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

Site Description: Chisholm Ave and 6th Street 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, ten 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 USAPHC (2010) report recommends 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.



Current Use: Grass and trees occupy this AOI.

Current Status: A PA/SI is underway with a recommendation to collect two soil samples to be analyzed for VOCs, TPH-DRO, and TPH-GRO; install two groundwater monitoring wells; collect and analyze groundwater samples for VOCs, SVOCs, metals TPH-DRO, and TPH-GRO. It was also recommended to develop an appropriate corrective measure for soils and groundwater at the 6th Street and Chisholm Avenue site following the additional monitoring well installations and groundwater sampling.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.23 Building 546 Photo Lab (SWMU 11)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU 1996

Sampling Visit. 1999

Delineation Reports.....2000

PA/SI.....2010-2012

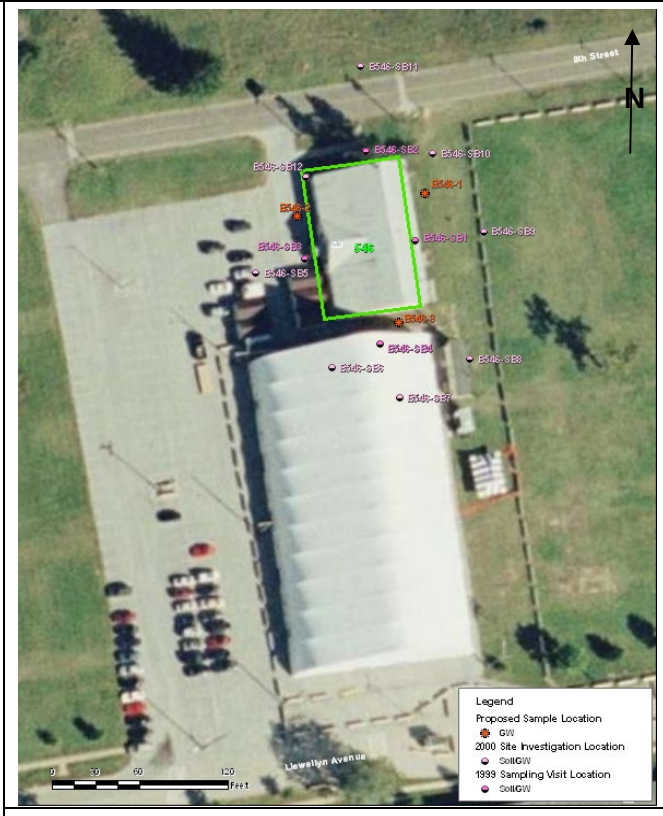
Contaminants of Potential Concern: SVOCs and metals.

Media of Concern: Groundwater

Site Location: Grid H4, Building 546 is located 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 Ft 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 1 duplicate subsurface soil sample) and 12 groundwater samples (plus 1 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.



Current Use: Unknown

Current Status: A PA/SI is underway with a recommendation to install three groundwater monitoring wells and analyze groundwater samples for SVOCs and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

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

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Sampling Visits 1999

SI 2001

PA/SI.....2010-2012

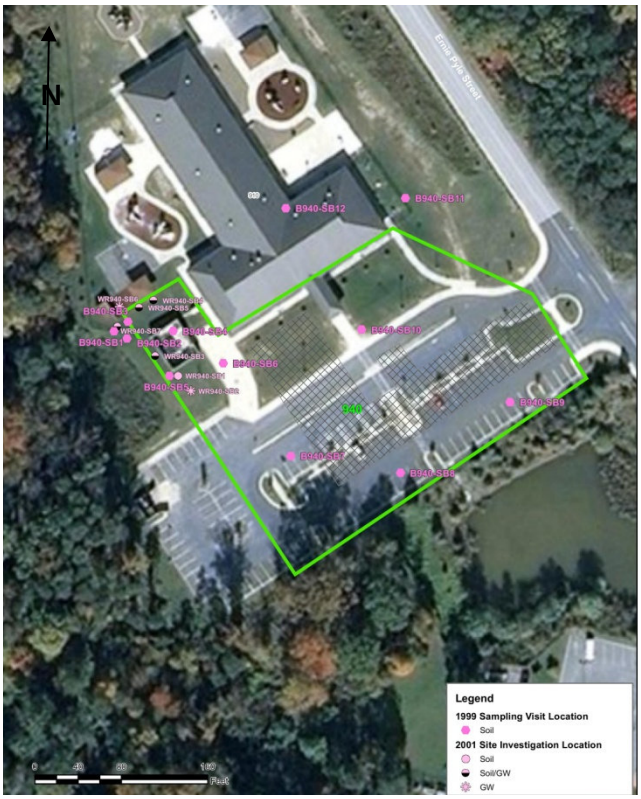
Contaminants of Potential Concern: Metals

Media of Concern: Groundwater

Site Location: Grid G3/H3, The former MP at Building 940 and the associated WR and OWS were located in the eastern portion of the installation, in the northwest corner of the intersection of 18th Street and Ernie Pyle Street.

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 a MP and the exact management of waste from the MP is unknown. The associated former WR (SWMU 13) and OWS (SWMU 12) were identified as potential SWMUs because there was systematic discharge of wash water to the OWS from the WR (BCM, 1996). There were no spills or reported releases identified during the SWMU study (BCM, 1996). Building 940 was vacant for a period of time and was demolished in 1999. The OWS and WR were also removed in 1999.

Previous Studies: Over the course of previous investigations at this AOI, 4 surface soil samples (plus 1 duplicate surface soil sample), 14 subsurface soil samples (plus 1 duplicate subsurface soil sample), and 6 groundwater samples (plus 2 duplicate groundwater samples) were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, cobalt, iron, aluminum, manganese, and chromium elevate the risk numbers above the site-specific action levels.



Current Use: Parking lot.

Current Status: A PA/SI is underway with a recommendation to install three groundwater monitoring wells and analyze groundwater samples for metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.25 Building 1007 – Army Reserves Motor Pool (SWMUs 14-18)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

SWMU Study 1996

Sampling Visits 1999

Draft Delineation Reports.....2000

PA/SI.....2010-2012

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

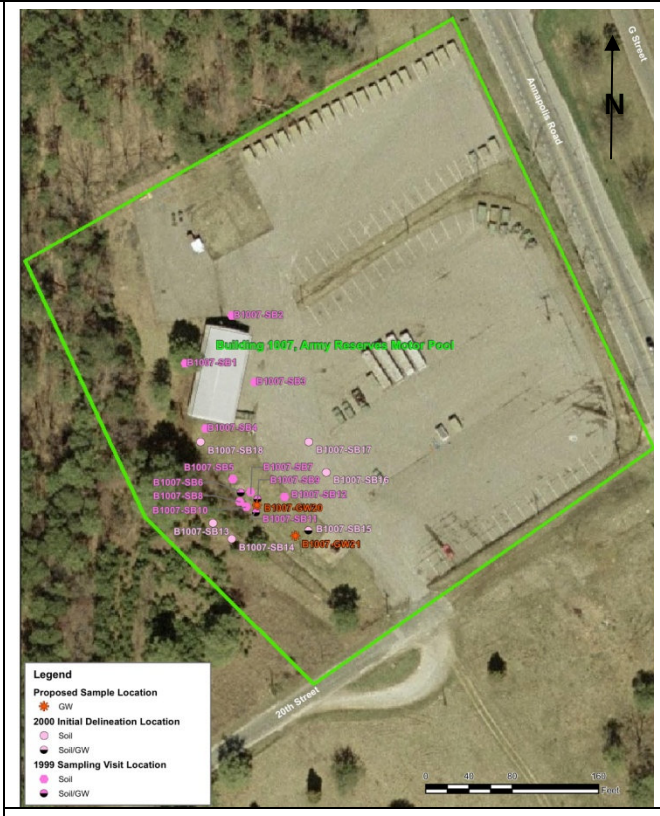
Media of Concern: Soil and groundwater

Site Location: Grid H2, Building 1007 is located in the northeastern portion of the installation, northwest of the intersection of 20th Street and State Route 175/Annapolis Road.

Site Description: This AOI is comprised of Building 1007 (SWMUs 14 and 15), OWS (SWMU 16), Vehicle WR (SWMU 17), and 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. Military vehicles were stored at the AOI by the U.S Army Reserves.

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 until it was demolished and removed from service in 1999/2000

Previous Studies: During previous sampling at this AOI, 1 surface soil sample (plus 1 duplicate surface soil sample), 17 subsurface soil samples (plus 1 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.



Current Use: Unknown

Current Status: A PA/SI is currently underway with a recommendation to collect two soil samples, install two monitoring wells, and collect two groundwater samples. The soil samples will be analyzed for VOCs. The groundwater samples will be analyzed for VOCs, SVOCs, TPH-GRO, and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.26 Building 2120c Vehicle Maintenance, Wash Rack, and Oil/Water Separators

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996
Sampling Visits 1999
SI 2001
Project Summary Report.....2003
PA/SI.....2010-2012

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

Media of Concern: Groundwater

Site Location: Grid H2, Building 2120c is located 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, anti-freeze, 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 there was 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, 2 surface soil samples (plus 1 duplicate surface soil sample), 22 subsurface soil samples (plus 2 duplicates), and 5 groundwater samples (plus 2 duplicates) were collected and submitted for chemical analysis. Based on a risk analysis of the analytical results, arsenic, cadmium, and chromium elevate the risk numbers above the site-specific action levels.

Current Use: Unknown.

Current Status: A PA/SI is underway with a recommendation to install three groundwater monitoring wells and analyze groundwater samples for VOCs, SVOCs, metals TPH-DRO, and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.27 Former Building 2128 Vehicle Maintenance

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996
SWMU Study 1996
Sampling Visits 1999
Initial Delineation.....2000
Data Gap Investigation.....2003
PA/SI.....2010-2012

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

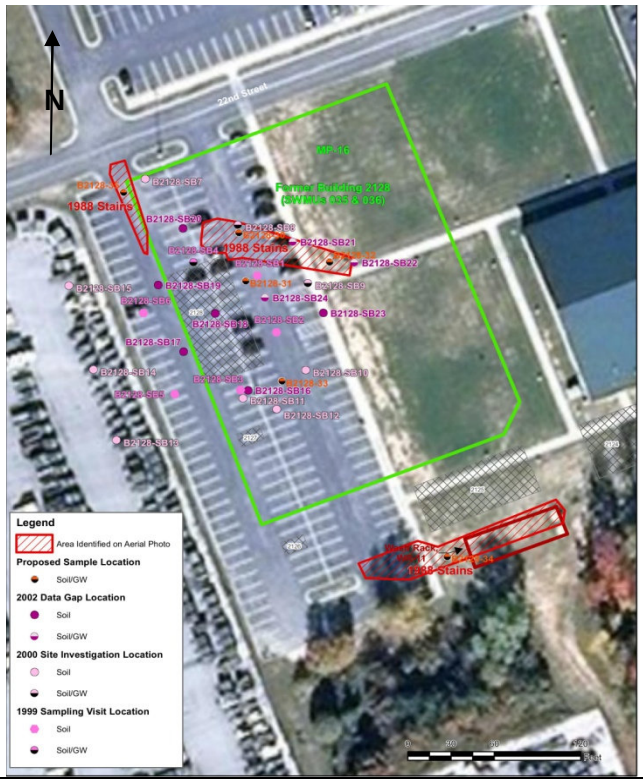
Media of Concern: Soil and groundwater

Site Location: Grid H2, Building 2128 is located in the northeastern portion of the installation, in the southeast quadrant of the intersection of Annapolis Road and 21 ½ Street.

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.

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.

Previous Studies: During previous investigations at Building 2128, 4 surface soil samples (plus 1 duplicate), 22 subsurface soil samples (plus 2 duplicates), and 6 groundwater samples (plus 2 duplicates) were collected. Based on a risk analysis of the analytical results, arsenic, lead, mercury, and chromium elevate the risk numbers above the site-specific action levels.



Current Use: Parking lot

Current Status: A PA/SI is underway with a recommendation to collect six surface (analyze for VOCs and SVOCs) and six subsurface (analyze for VOCs, SVOCs, and metals) soil samples, install six groundwater monitoring wells and analyze groundwater samples for VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.28 Former Building 2213 Painting and Sheet Metal Shop (SWMU 38)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996
Historic Aerial Photograph Study.....1996
Sampling Visit 2000
SI 2001
PA/SI.....2010-2012

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

Media of Concern: Groundwater

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.

Site Description: Building 2213 was identified as a potential SWMU in the 1996 SWMU study (BCM, 1996) because it was formerly used as a painting and sheet metal shop. Building 2213 had been a sheet metal and sign fabrication shop from the 1960's until it was demolished in the mid-2000's. Before its use as a sheet metal and sign shop, the building was used as administrative offices.

Building 2213 was used to store small quantities of paints, lubricants, cleaners, and mineral spirits. The building also formerly served as a drop-off point for un-used and waste oil-based and latex paints. The oil-based paints were stored as a hazardous waste in a hazardous waste locker located 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

Previous Studies: Over the course of previous investigations at this AOI, 4 surface soil samples (plus 1 duplicate), 11 subsurface soil samples (plus 2 duplicates), and 8 groundwater samples (plus 2 duplicates) were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, cobalt, manganese, iron, and chromium elevate the risk numbers above the site-specific action levels.

Current Use: Grass and trees

Current Status: A PA/SI is underway with a recommendation to install four groundwater monitoring wells and analyze groundwater samples for VOCs, SVOCs, metals TPH-DRO, and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.29 Building 2227 Maintenance Shop, Wash Rack, and Oil/Water Separator

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

SWMU Study 1996

Sampling Visit 1999

Initial Delineation Report 2001

PA/SI.....2010-2012

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

Media of Concern: Soil and groundwater

Site Location: Grid H5, Former Building 2227 was located in the southeastern portion of the installation, northeast of the intersection of 3rd Street and Pepper Road.

Site Description: Constructed in 1941, Building 2227 (SWMU 147) was used as a vehicle repair shop until the mid-1980s. The WR (SWMU 44) 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 2224.

Previous Studies: Over the course of previous investigations at this AOI, 27 subsurface soil samples (plus 2 duplicate samples) and 17 groundwater samples (plus 1 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.

Current Use: Grass and trees occupy this AOI.

Current Status: A PA/SI is underway with a recommendation to collect four soil samples, install four groundwater monitoring wells and analyze soil and groundwater samples for VOCs, metals TPH-DRO, TPH-GRO, and SVOCs (soil only).

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.30 Former Building 2266

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study 1996

SI..... 2002

PA/SI 2010-2012

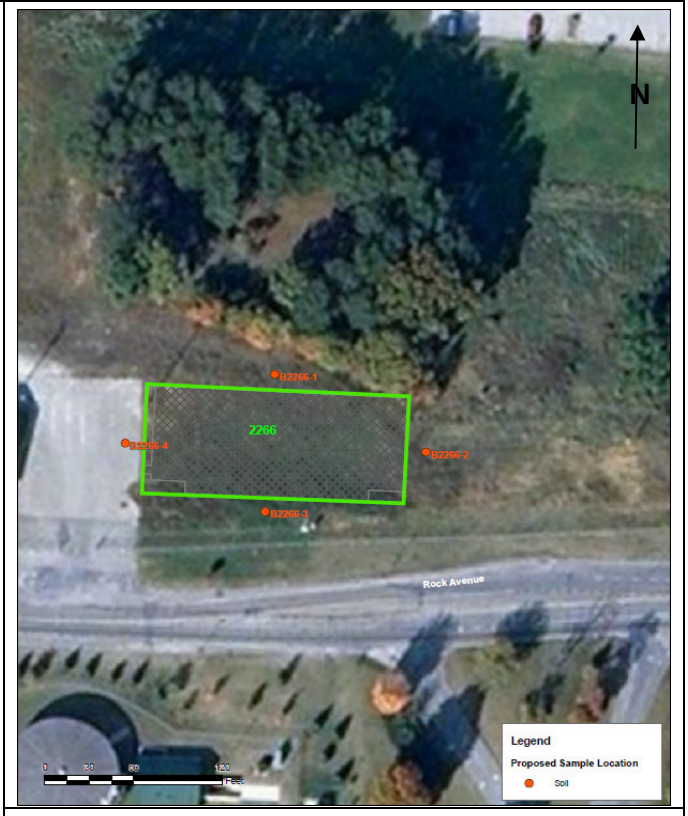
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H5, located in the southeastern portion of the installation, east of Pepper Road and north of 3rd Street

Site Description: Former Building 2266 was identified as an AOI because the 2006 FGGM Installation Action Plan had it listed in a line item as an AOI. No other information is available regarding past usage 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 Installation Action Plan lists a 6 September 2002 Site Investigation 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: Unknown

Current Status: In order to determine if a release occurred, four soil samples should be collected, one from each of the four sides of the former building. Groundwater samples will not be collected because this AOI is within the outline of OU-4, and any groundwater investigation of OU-4 will include this AOI.

Cleanup/Exit Strategy: Collect and analyze data. Based on the results the AOI will either require no further action or further investigation will be recommended.

2.1.25.31 Building 2276 Warehouse (SWMU 63) and 1918 Warehouse (SWMU 64)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study..... 1996

Historic Aerial Photograph Study..... 1996

Sampling Visit..... 2000

SI..... 2001

PA/SI..... 2010-2012

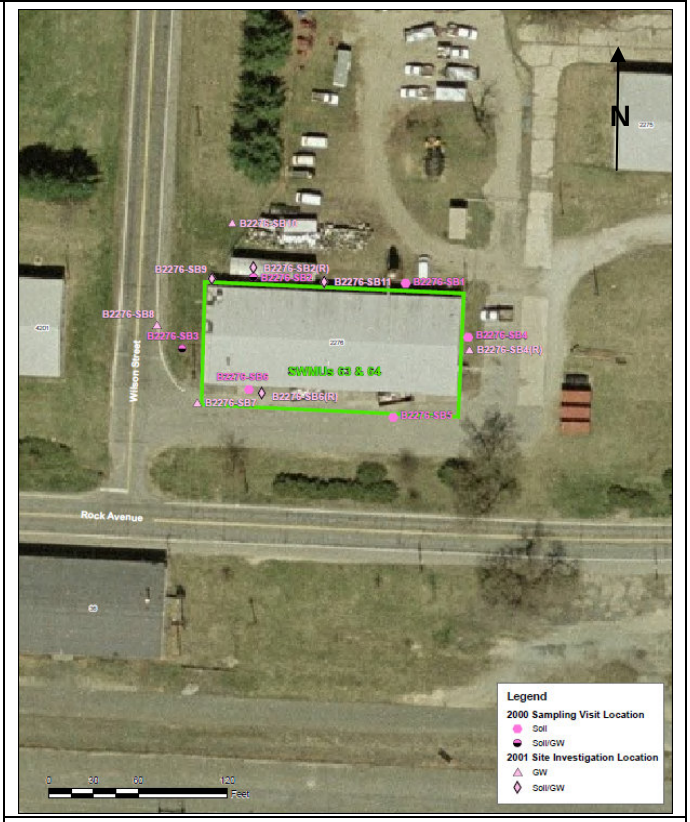
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid G5 and H5, located in the southeastern portion of the installation, in the northeast corner of the intersection of Rock Avenue and Wilson Street. Building 2276 falls within the general area 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.

Previous Studies: Over the course of previous investigations at this site, four surface soil samples, six subsurface soil samples and ten groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, tetrachloroethene and some metals elevate the risk numbers above the site-specific action levels.



Current Use: Unknown

Current Status: The current PA/SI recommended no further action for this AOI. Further groundwater investigation will be conducted under the OU-4 investigation. Furthermore, a vapor intrusion assessment of Building 2276 will also be conducted under the OU-4 investigation.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.25.32 Building 2288 - Paint Storage Shed (SWMU 69)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Historic Aerial Photograph Study 1996

RFA 3rd Phase 1999

PA/SI 2010-2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid G5 and H5, located in the southeastern portion of the installation, in the northeast corner of the intersection of Rock Avenue and Wilson Street

Site Description: Building 2288 was a small, concrete block storage building for Building 2276. The building was reportedly used in the past for storage of paints, thinners, and gasoline. Disposal practices in the building were unknown.

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

Current Use: This AOI is a grassy area

Current Status: The current PA/SI recommended no further action for this AOI. Further groundwater investigation can be conducted under the OU-4 investigation.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.25.33 Building 2482 Boiler Plant (SWMU 72)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study..... 1996

Sampling Visit..... 2000

SI..... 2001

Data Gap Investigation 2002

PA/SI..... 2010-2012

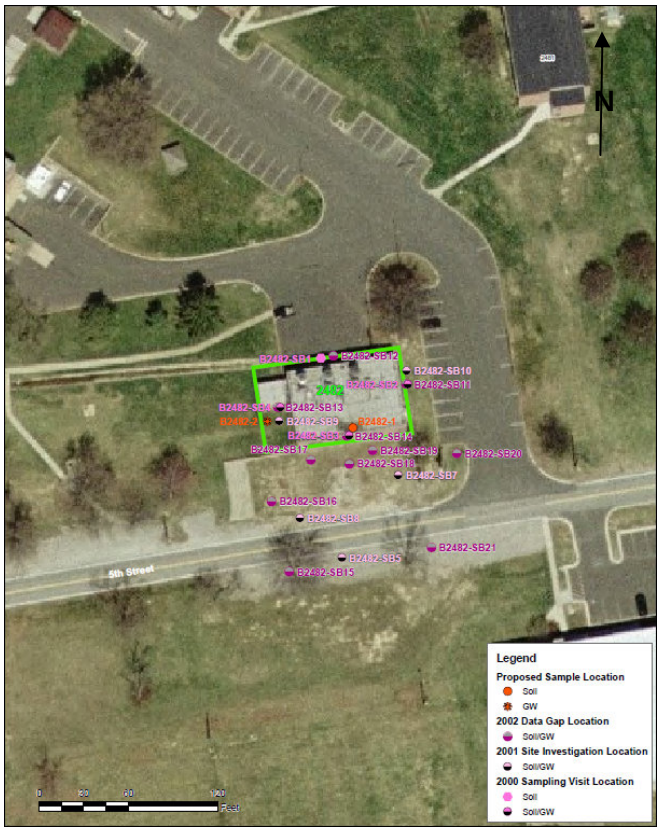
Contaminants of Potential Concern: SVOCs, metals, PCBs, and dioxin

Media of Concern: Soil and Groundwater

Site Location: Grid H4, located 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 contains three oil-fired boilers. A 400-gallon AST located 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 fuel oil fiberglass-reinforced plastic 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.



Current Use: Unknown

Current Status: A PA/SI is underway with a recommendation to collect four surface soils samples and analyze for PCBs and dioxins, collect one subsurface soil sample and analyze for SVOCs, install one groundwater monitoring well and analyze the groundwater sample for metals and SVOCs

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.34 Building 2490 Medical Lab (SWMU 74)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study..... 1996

Sampling Visit..... 1999

PA/SI..... 2010-2012

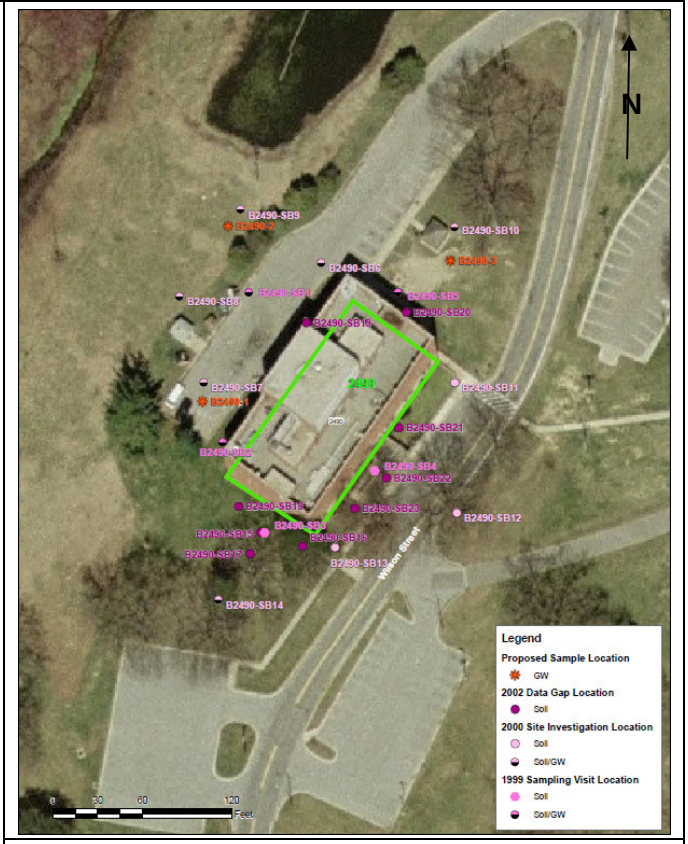
Contaminants of Potential Concern: Metals TPH-DRO, and TPH-GRO

Media of Concern: Groundwater

Site Location: Grid H4, located 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. The basement was used as a radioactive section of a clinical laboratory from 1960 to 1994. Chemicals used in the radioactive section include buffer solutions, alcohol, and WD-40. The radioactive materials are stored in a refrigerated room. Chemicals used in the lab include methanol, acid dichromate, 2-proponal, hexanes, and 2,2,4-trimethyl pentane. Chemicals which are being used are kept in the refrigerated room; otherwise, new chemicals are stored in flammable cabinets.

Previous Studies: Over the course of previous investigations at this site, nine surface soil samples, 21 subsurface soil samples, and nine 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.



Current Use: Unknown

Current Status: A PA/SI is underway with a recommendation to install three groundwater monitoring wells and analyze groundwater samples for dissolved and total metals, TPH-DRO, and TPH-GRO

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.35 Building 2501 Maintenance (SWMU 75) and 1941 Processing (SWMU 76)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study..... 1996

Sampling Visit..... 2000

RCRA and Data Gap Reports..... 2003

PA/SI..... 2010-2012

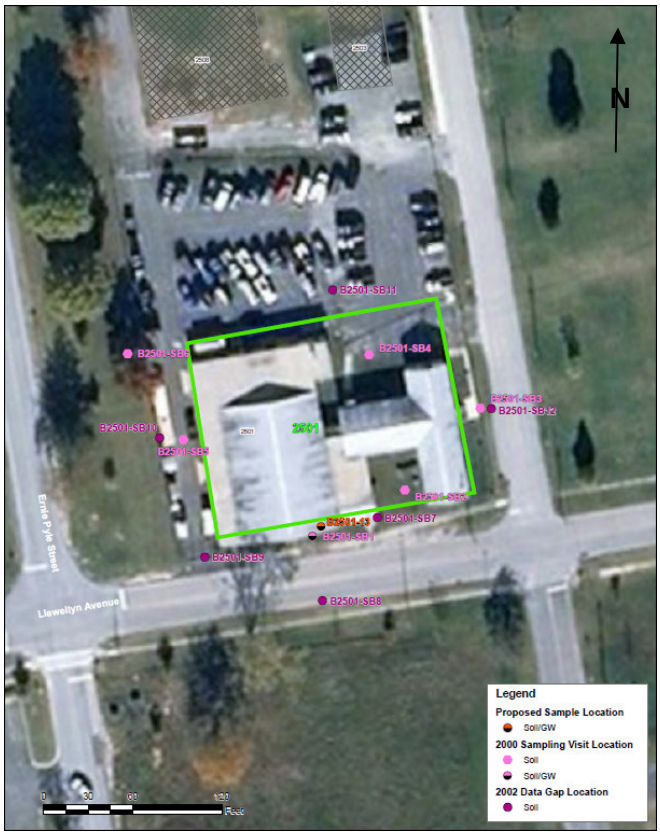
Contaminants of Potential Concern: TPH-DRO, TPH-GRO, VOCs, and metals

Media of Concern: Groundwater

Site Location: Grid H4, located 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 uses 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, five surface soil samples, 18 subsurface soil samples, and one groundwater sample were collected and submitted for analysis. Based on a risk analysis of the analytical results, arsenic elevates the risk numbers above the site-specific action levels. A sheen was observed at location SB-1.



Current Use: Unknown

Current Status: A PA/SI is underway with a recommendation to install one groundwater monitoring wells and analyze groundwater samples for VOCs, total and dissolved metals TPH-DRO, TPH-GRO, and cyanide.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.36 Oil/Water Separator and Wash Racks near Building 2630

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study..... 1996

Sampling Visits..... 1999

SI..... 2001

PA/SI..... 2010-2012

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

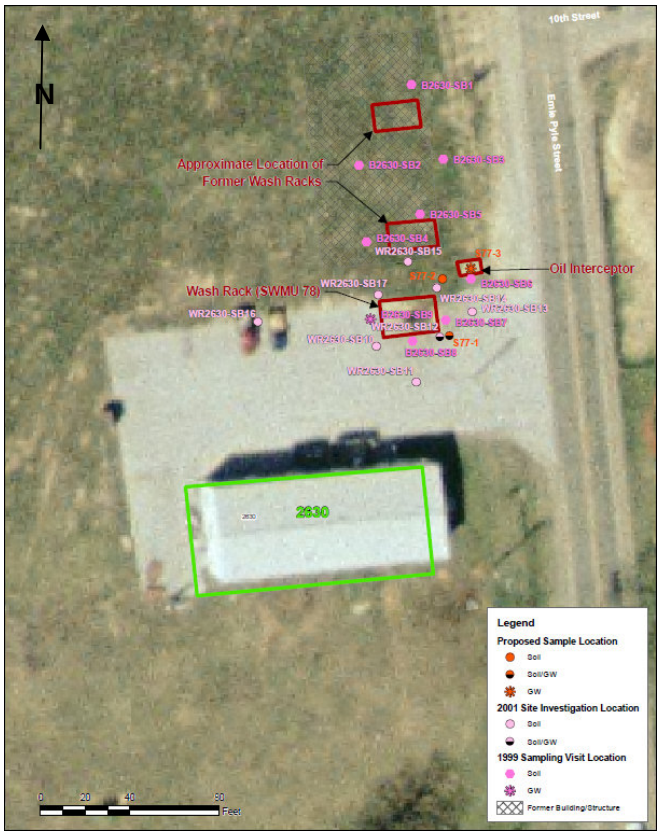
Media of Concern: Soil and Groundwater

Site Location: Grid H4, located 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 which drained to the OWS (SWMU 77).

Formerly two WRs, identified as SWMU 79, were located within a former building north of Building 2630. Based on facility drawings, the former WR was constructed of a bermed concrete platform with a catch basin. It was 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, MCPP and arsenic elevate the risk numbers above the site-specific action levels.



Current Use: Unknown

Current Status: A PA/SI is underway with a recommendation to collect two surface soil samples and analyze for herbicides, install two groundwater monitoring wells and analyze groundwater samples for VOCs, SVOCs, metals, TPH-DRO, TPH-GRO, herbicides, and pesticides

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.37 Building 2724 – Outdoor Recreation Equipment Rentals Wash Rack

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study..... 1996

RFA 3rd Phase 1999

Sampling Visits.....1999 and 2001

SI..... 2001

PA/SI 2010-2012

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

Media of Concern: Soil and Groundwater

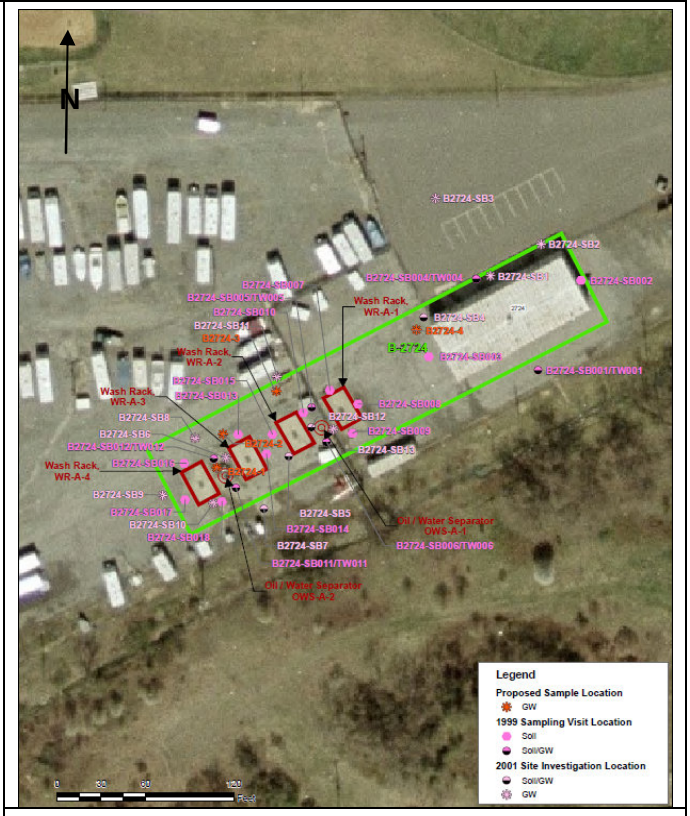
Site Location: Grid H3, located in the eastern portion of the installation, 700 feet north of the intersection of Mapes Road and Ernie Pyle Street

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 OWSs were located approximately 100 feet to the west-southwest of Building 2724. The WRs consisted of concrete basins that discharged into the two OWSs. The OWSs discharged into the hazardous waste storage shed, located in the parking lot. The WRs and OWSs 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, anti-freeze, 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, MCPA, iron, aluminum, mercury, cobalt, manganese, arsenic, copper, and chromium elevate the risk numbers above the site-specific action levels.



Current Use: Unknown

Current Status: A PA/SI is underway with a recommendation to collect four soil samples and analyze for VOCs, install four groundwater monitoring wells and analyze groundwater samples for metals, VOCs, herbicides, pesticides, TPH-GRO, and TPH-DRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.38 Building 2728 Wash Racks and Associated Oil/Water Separators

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study..... 1996

RFA 3rd Phase..... 1999

SI..... 2001

PA/SI..... 2010-2012

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

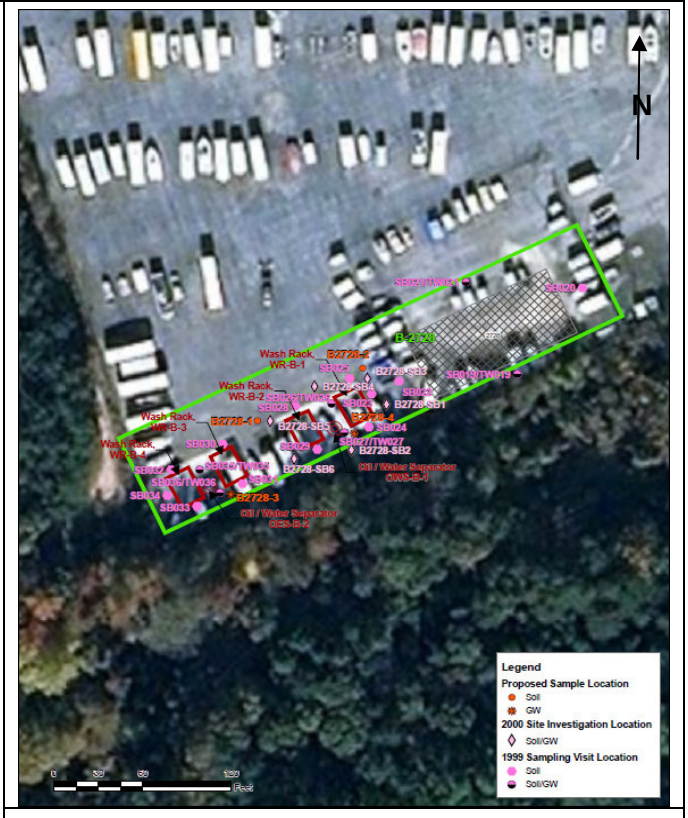
Media of Concern: Soil and Groundwater

Site Location: Grid H3, located 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, which stored relatively small quantities of hazardous chemicals (motor and lubricating oil, anti-freeze, used oil, degreasers, and batteries).

There are four WRs (SWMUs 89-92) and two OWSs (SWMUs 87 & 88) that 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; 4 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.



Current Use: Storage of outdoor recreational equipment/vehicles

Current Status: A PA/SI is underway with a recommendation to collect two surface soil samples and analyze for herbicides, install two groundwater monitoring wells and analyze groundwater samples for VOCs and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.39 Former Building 2802 Dental Research Laboratory (SWMU 93)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study..... 1996

Historic Aerial Photograph Study..... 1996

Sampling Visit..... 2001

PA/SI..... 2010-2012

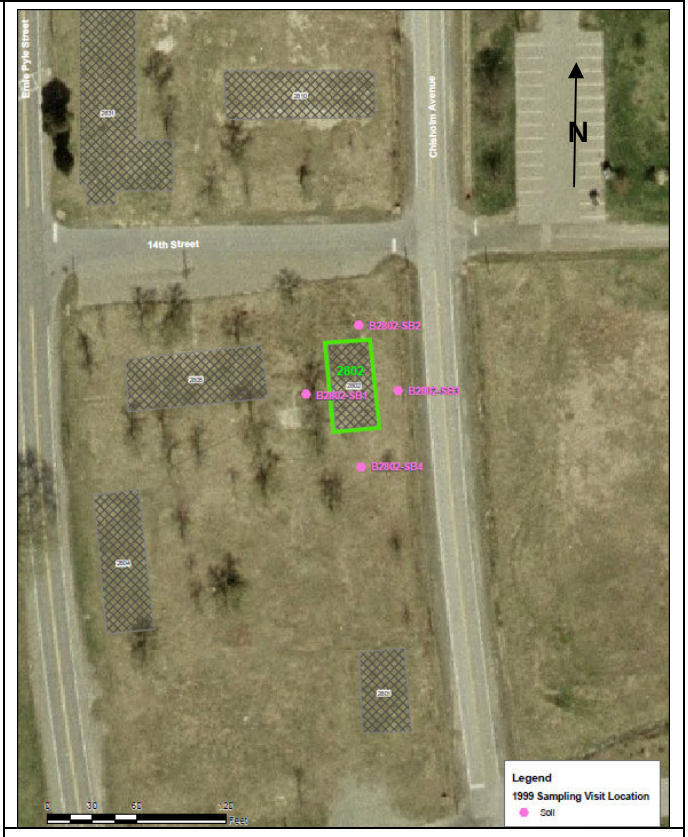
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H3, located 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 ten years starting in the early 1970s. The dental research laboratory involved the use of radioactive materials until they were 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 storage of 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.



Current Use: Grassy field.

Current Status: The current PA/SI recommends no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.25.40 Building 2804 Lab (SWMU 94)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Sampling Visit 2000

Data Gap Investigation.....2002

PA/SI.....2010-2012

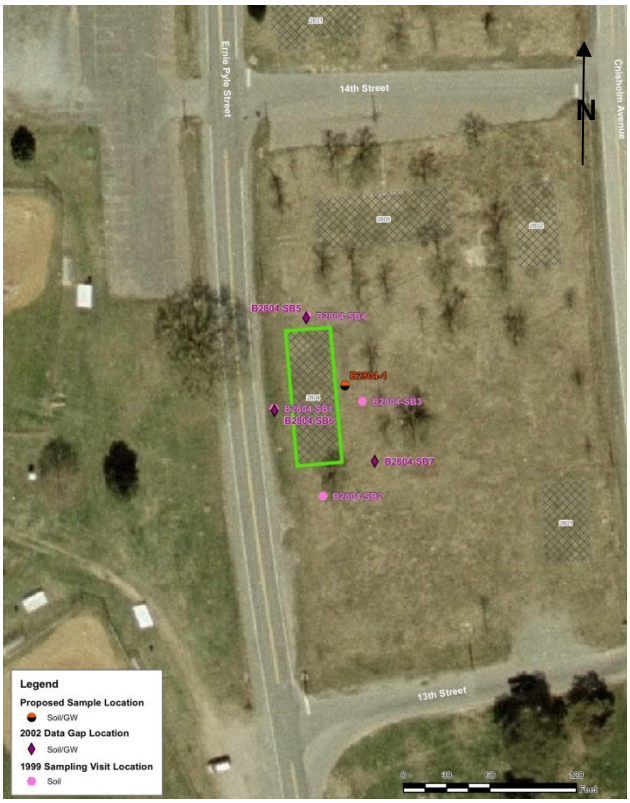
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H3, Former Building 2804 was located in the eastern portion of the installation, north of the intersection of Ernie Pyle and 13th Streets.

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). Building 2804 was used to store chemicals 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.

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.



Current Use: None, grass field

Current Status: The current PA/SI recommends no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.25.41 Former Building 2805 Lab (SWMU 95)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study..... 1996

Sampling Visit..... 2000

Data Gap Investigation 2002

PA/SI..... 2010-2012

Contaminants of Potential Concern:

None identified

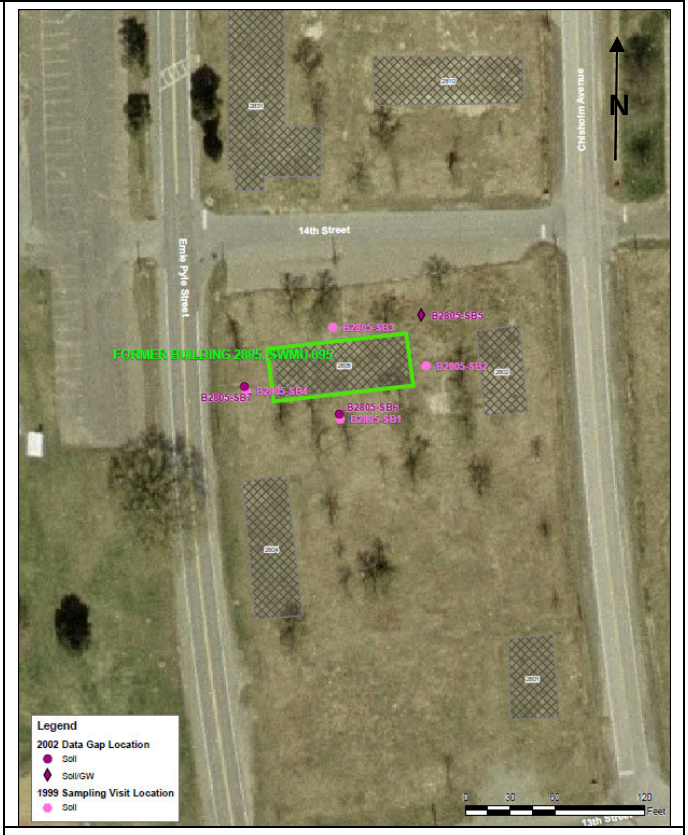
Media of Concern: None identified

Site Location: Grid H3, located in the eastern portion of the installation, southeast of the intersection of Ernie Pyle Street and 13th Street

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 as a microencapsulation lab since the 1970's and the exact management of waste practices in the past are unknown. There were no spills or reported releases identified by BCM 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 had been used as barracks. Building 2805 was demolished in the late 1990s.

Previous Studies: Over the course of previous investigations at this site, seven 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.



Current Use: None, grassy field

Current Status: The current PA/SI recommends no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.25.42 Former Buildings 2810, 2811, and 2832

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

SWMU Study 1996

PA/SI.....2010-2012

Contaminants of Potential Concern: Metals

Media of Concern: Soil and groundwater

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

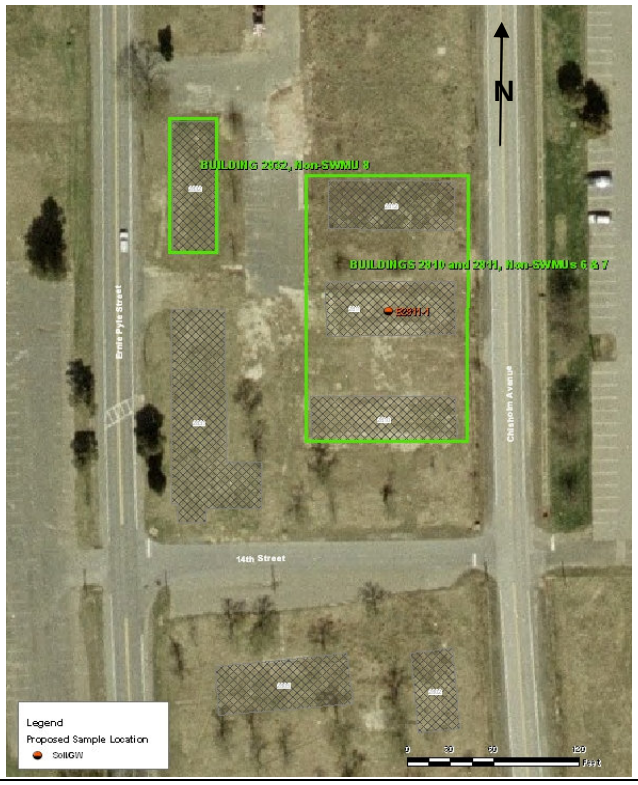
Site Description: Former Building 2810 – Lab and 1941 Dayroom (Non-SWMU 6) was constructed in the early 1940s and has only been used for administrative purposes. A library moved here in the 1990s.

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: No soil or groundwater samples have been collected over the course of previous studies at this AOI.



Current Use: This AOI is a grassy field.

Current Status: A PA/SI is underway with a recommendation to collect one soil samples, install one groundwater monitoring well, and analyze soil groundwater samples for metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.43 Building 3000 Screen Repair Industrial Shop (SWMU 98)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996
Sampling Visit 2000
Data Gap Investigation.....2002
PA/SI.....2010-2012

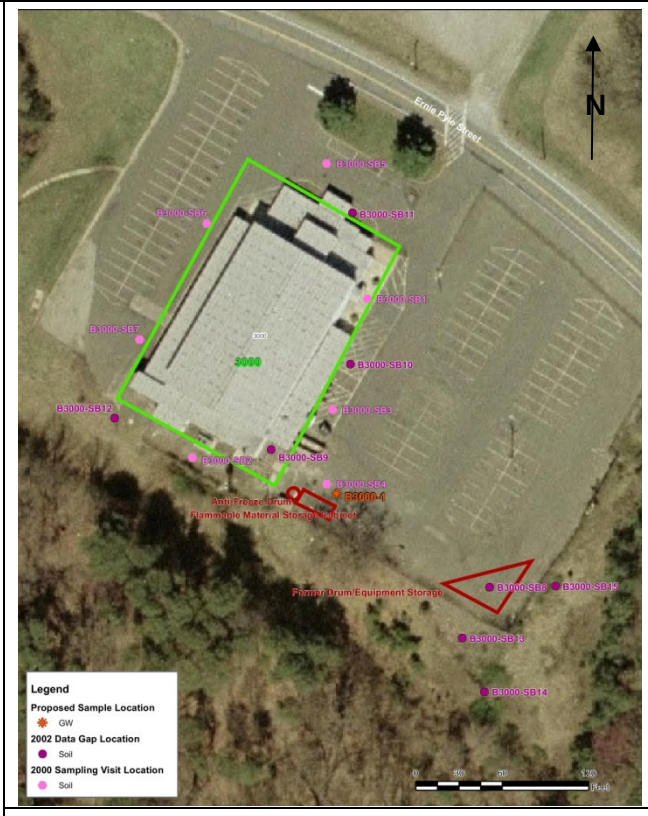
Contaminants of Potential Concern: VOCs

Media of Concern: Groundwater

Site Location: Grid G2, Building 3000 is located in the northeastern portion of the installation, approximately 300 feet east of the intersection of 21st Street and Ernie Pyle Street.

Site Description: Building 3000 was identified as a SWMU because there is systematic waste discarded and contained at the facility (BCM, 1996). In addition there was potential of spillage from the materials stored in the parking lot. There were no spills or reported releases identified during the SWMU study (BCM, 1996). Freon recovery and disposal also occurs. The building was surrounded by pavement. This AOI was handling chemicals properly, they 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, nine 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.



Current Use: Unknown

Current Status: A PA/SI is underway with a recommendation to install one groundwater monitoring well and analyze groundwater samples for VOCs.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.44 Building 4272 – 1941 Cold Storage (Non- SWMU 9)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study 1996

SWMU Study..... 1996

PA/SI 2010-2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid G5, located 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 no further action for this AOI.

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

Current Use: Unknown

Current Status: The current PA/SI recommends no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.25.45 Building 4411, Former Hospital (SWMU 99)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study..... 1996

Sampling Visit..... 1999

Data Gap Investigation 2002

PA/SI..... 2010-2012

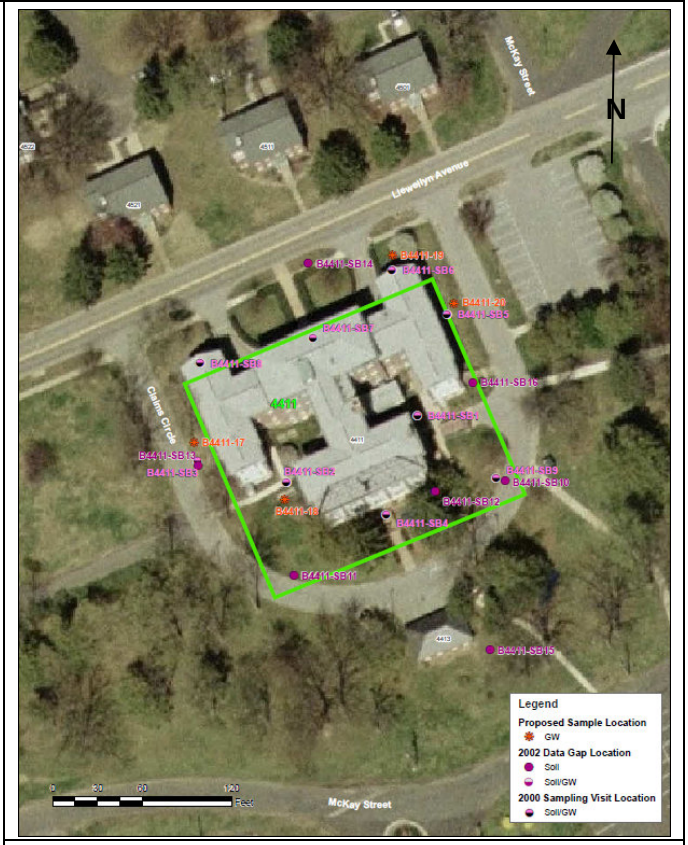
Contaminants of Potential Concern: SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Groundwater

Site Location: Grid G4, located 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 exact management of waste from the hospital is unknown.

Previous Studies: Over the course of previous investigations at this AOI, 16 direct push borings were advanced around Building 4411; five surface soil, 13 subsurface soil, and ten 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.



Current Use: Unknown

Current Status: A PA/SI is underway with a recommendation to install four groundwater monitoring wells and analyze groundwater samples for SVOCs, TPH-DRO, TPH-GRO, and total metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.46 Building 4587 Motor Repair (SWMU 101) and 1934 Garage (SWMU 102).

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Historic Aerial Photograph Study 1996

RFA 3rd Phase 1999

SI 2001

PA/SI 2010-2012

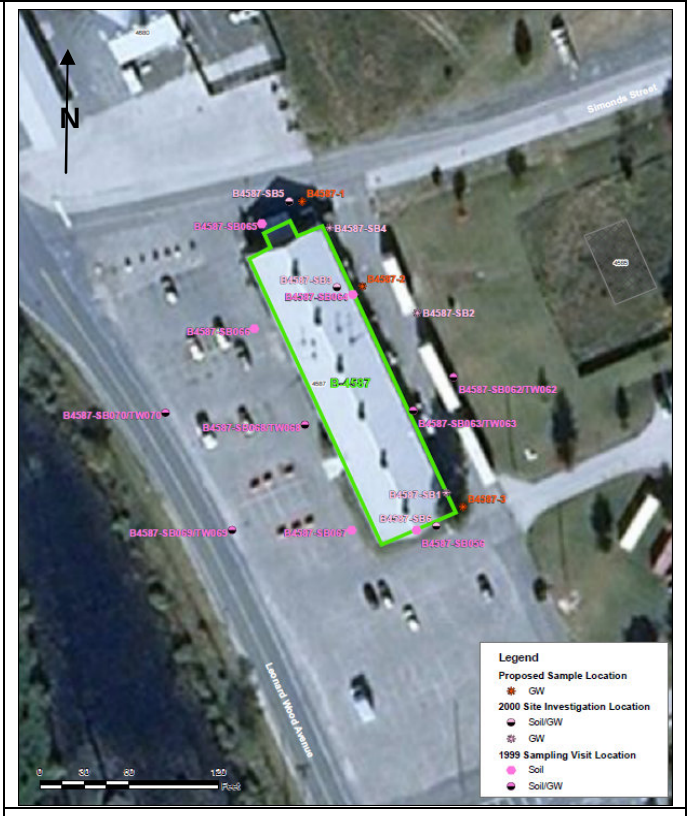
Contaminants of Potential Concern: VOCs, metals, herbicides, and PCBs

Media of Concern: Groundwater

Site Location: Grid G4, located 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 are placed in 55-gallon drums. The used oil goes into a double-walled 800-gallon AST located outside of the east wall of the building. When the 55-gallon drums become full, the drums are turned into DRMO for disposal. The used oil and cleaner from the parts washer are also managed through the DRMO. An OWS is located in the southern end of Building 4587. The OWS accepts 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, six surface soil samples, seven 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.



Current Use: Unknown

Current Status: A PA/SI is underway with a recommendation to install three groundwater monitoring wells and analyze groundwater samples for VOCs, both total and dissolved metals, herbicides, and PCBs.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.47 Building 4680 Service Station and Past Vehicle Repair Shop (SWMU 103)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study..... 1996

Historic Aerial Photograph Study..... 1996

RFA 3rd Phase..... 1999

SI..... 2001

PA/SI..... 2010-2012

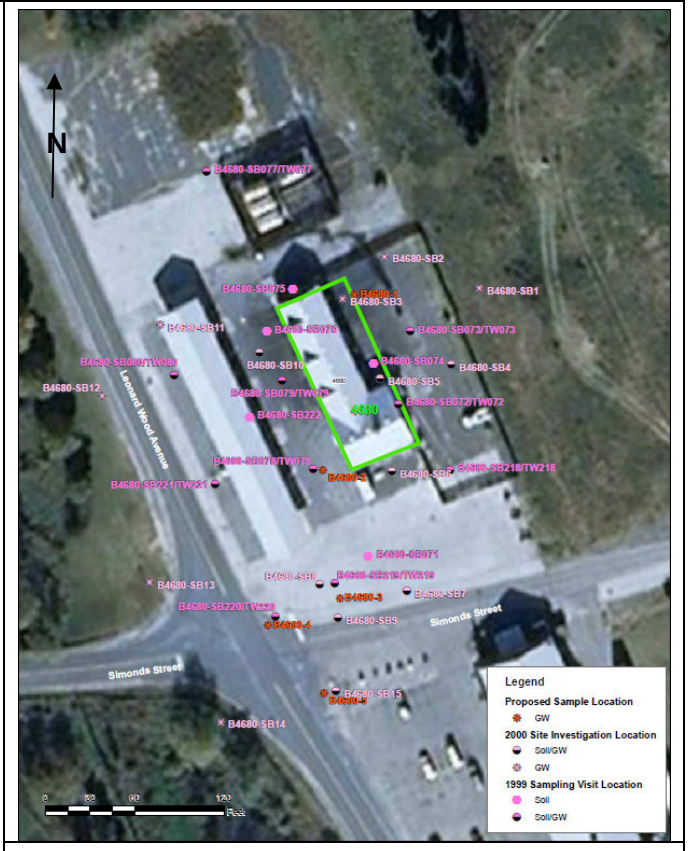
Contaminants of Potential Concern: VOCs, SVOCs, metals, and PCBs

Media of Concern: Groundwater

Site Location: Grid G4, located 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 which 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.



Current Use: Unknown

Current Status: A PA/SI is underway with a recommendation to install five groundwater monitoring wells and analyze groundwater samples for VOCs, SVOCs, metals, and PCB. An additional well is planned to confirm the presence of Acrolein at GW078.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.48 Building 6865 Wash Rack System for Former Golf Course Club House

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Historic Aerial Photograph Study 1996

PA/SI 2010-2012

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

Media of Concern: Soil and groundwater

Site Location: Grid F3, located on the golf course in the central portion of the installation at 6800 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 current 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, is located directly south of Building 6800, and is addressed as a separate site.

Previous Studies: No sampling or laboratory analysis as conducted at this AOI.

Current Use: Golf course

Current Status: A PA/SI is underway with a recommendation to collect three surface soil samples to be analyzed for VOCs, SVOCs, metals, herbicides, and pesticides; install three groundwater monitoring wells, collect and analyze groundwater samples for VOCs, SVOCs, metals, herbicides, and pesticides.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.49 Wash Rack and Oil/Water Separator Southeast of Former Building 8480

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study..... 1996

RFA 3rd Phase 1999

SI..... 2001

Data Gap Investigation 2002

PA/SI 2010-2012

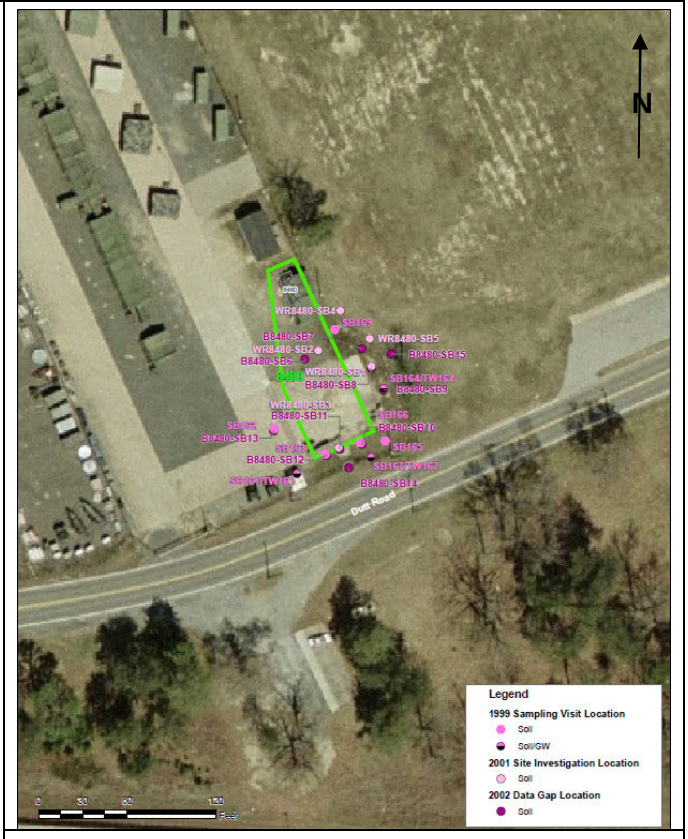
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F5, located in the southwestern portion of the installation north of O'Brien Street.

Site Description: This AOI is comprised of a former wash rack (SWMU 111) which discharged wash water to an oil/water separator (SWMU 110), which in turn discharged to a sanitary sewer line south of the wash rack. The discharge water was treated at a wastewater treatment plant. This former wash rack and oil/water separator were 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.



Current Use: Unknown, parking lot, and grass areas.

Current Status: The current PA/SI recommended no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.1.25.50 Building 8485 Vehicle Maintenance and Former Wash Rack

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study.....1996

Historic Aerial Photograph Study.....1996

RFA 3rd Phase.....1999

SI's.....2001 and 2002

PA/SI.....2010-2012

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

Media of Concern: Soil and groundwater

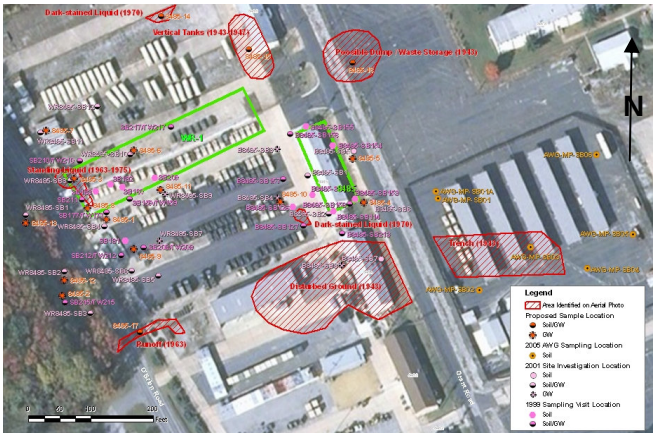
Site Location: Grid F5, located in the southwest portion of the installation in the southeast quadrant of the intersection of O'Brien Road and Simonds Street

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, five surface soil samples, 35 subsurface soil samples (plus three duplicates), 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.



Current Use: Unknown and a parking lot.

Current Status: A PA/SI is underway with a recommendation to collect four surface soil samples, install 13 additional groundwater monitoring wells, collect groundwater samples, and analyze both the soil and groundwater samples for VOCs, SVOCs, metals, and PCBs.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.51 Building 8486 Maintenance Shop

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study 1996

SWMU study 1996

RFA 3rd Phase 1999

SI 2001

PA/SI 2010-2012

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

Media of Concern: Groundwater

Site Location: Grid F5, located 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.

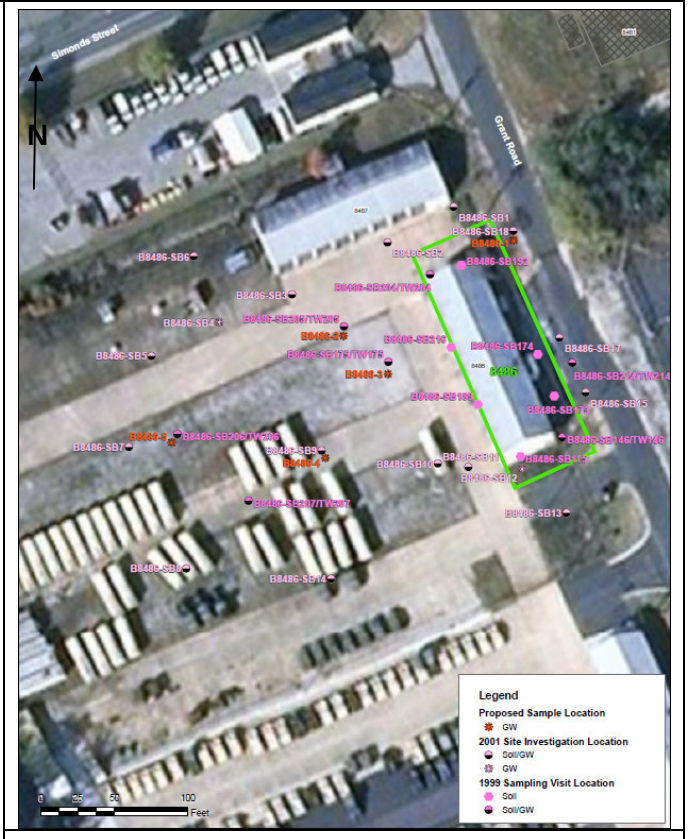
Asphalt and concrete parking lots that contain several sheds used to house paints, oils, anti-freeze, and used oil are located west of Building 8486.

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

Two USTs were formerly present 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 was removed in 1994. The 2,500-gallon tank was installed in 1995 and was removed in 1999.

Small quantities of hazardous chemicals have historically been used and stored in storage cabinets at designated storage 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-trimethylbenxene, arsenic, naphthalene, and chromium elevate the risk numbers above the site-specific action levels.



Current Use: Unknown

Current Status: A PA/SI is underway with a recommendation to install five groundwater monitoring wells and analyze groundwater samples for VOCs, SVOCs, total and dissolved metals, PCBs, TPH-DRO, and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.52 Building 8487 Vehicle Maintenance

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study..... 1996

RFA 3rd Phase 1999

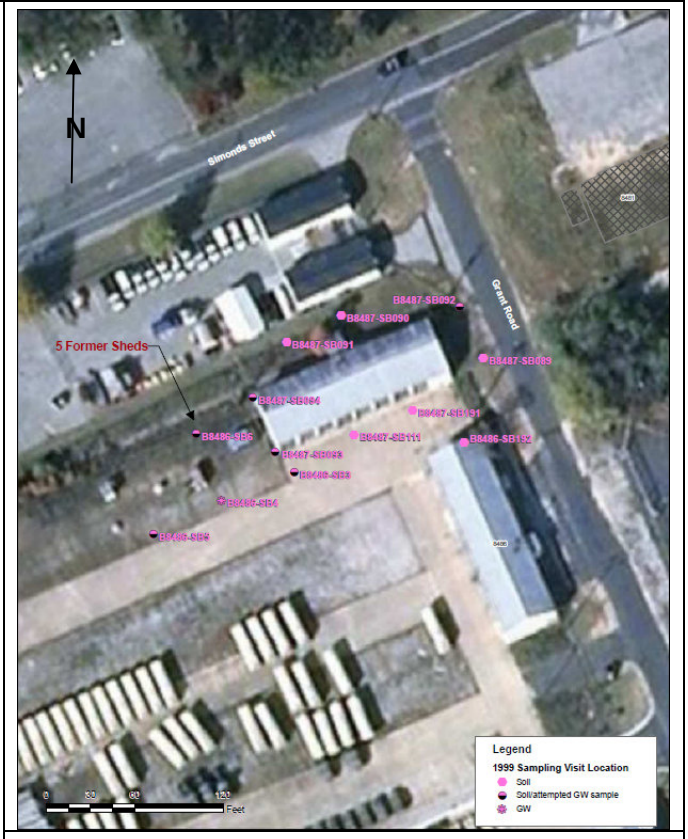
Contaminants of Potential Concern: TPH, VOCs, and SVOCs

Media of Concern: Soil and Groundwater

Site Location: Grid F5, located 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) has been used as a motor pool which conducts maintenance checks on military vehicles, including oil changes. This AOI also contains five sheds west of Building 8487 which stored 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 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.



Current Use: Unknown

Current Status: The current PA/SI recommends no further action for this AOI.

Cleanup/Exit Strategy: Either this AOI will require no further action or be moved forward into the SI phase of CERCLA.

2.1.25.53 Buildings 8549, 8550, and 8551 (SWMU 121-128 and 149)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Historic Aerial Photograph Study.....1996

RFA 3rd Phase.....1999

SI 2001

Project Summary Report.....2003

PA/SI.....2010-2012

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

Media of Concern: Soil and Groundwater

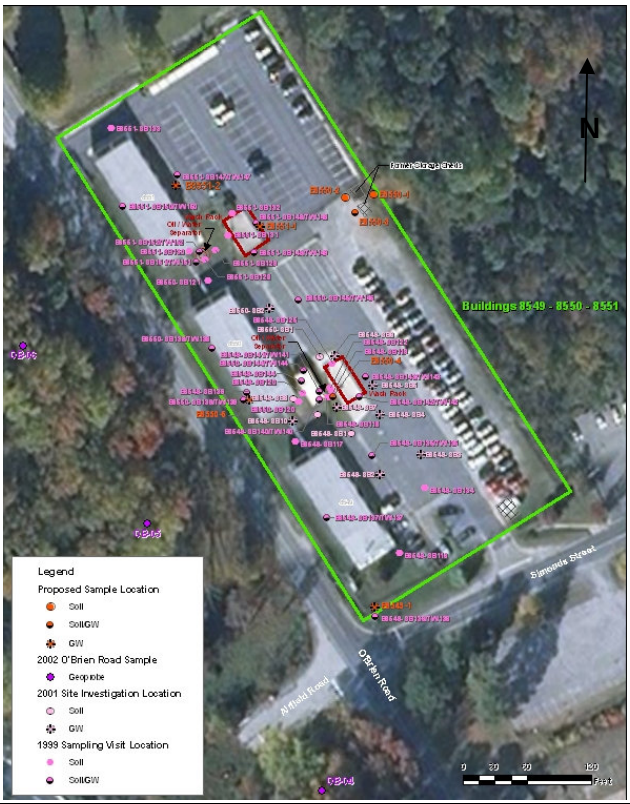
Site Location: Grid F4, located in the southwest portion of the installation near the intersection of O'Brien Road and Simonds Street

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 wash rack (SWMU 128) and oil/water separator (SWMU 127) were identified as SWMUs because there was systematic discharge of wash water to the oil/water separator (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.



Current Use: Unknown/Practice hall and instrument storage

Current Status: A PA/SI is underway with a recommendation to collect three surface soil samples and analyze for VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO; collect one subsurface soil sample and analyze for SVOCs; install six groundwater monitoring wells, sample the wells and analyze the groundwater samples for VOCs, SVOCs, metals, TPH-DRO, TPH-GRO, cyanide, and PCBs.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.54 Building 9581 Wastewater Treatment Plant (SWMU 138)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Historic Aerial Photograph Study.....1996

RFA 3rd Phase.....1999

PA/SI.....2010-2012

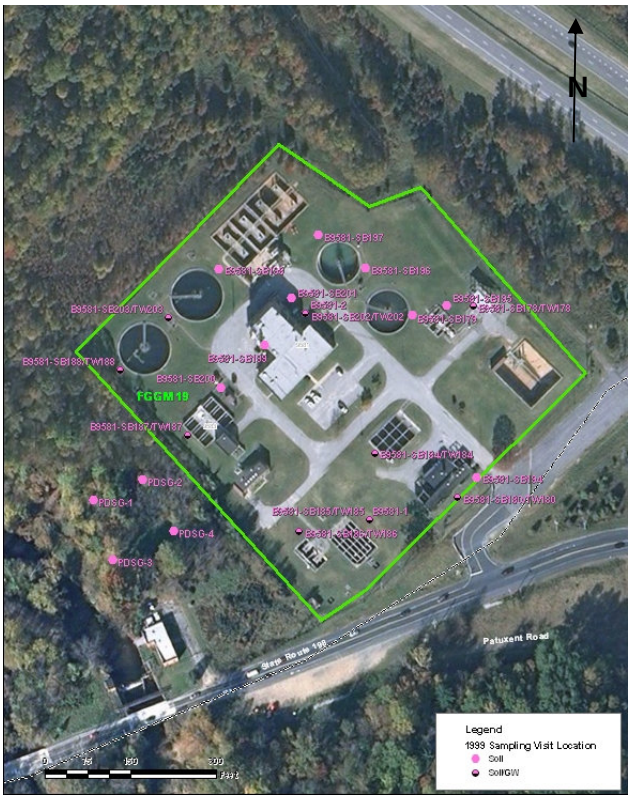
Contaminants of Potential Concern: VOCs, metals, and pH

Media of Concern: Groundwater

Site Location: Grid E4 and E5, located in the southwest portion of the installation approximately 600 feet southwest of the intersection of State Routes 32 and 198.

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, a 4,000-gallon steel UST containing heating oil that was abandoned in November 2000, a 10,000-gallon steel UST containing diesel fuel that was abandoned in 1990, and multiple open-top, below-ground wastewater treatment tanks

Previous Studies: Over the course of previous investigations at this AOI, one surface soil sample, 22 subsurface soil samples, and nine 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.



Current Use: Sewage treatment facility.

Current Status: A PA/SI is underway with a recommendation to install two groundwater monitoring wells and analyze groundwater samples for VOCs, metals, and pH.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.55 Possible Vehicle Service Area A – 1943

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study 1996

PA/SI 2010-2012

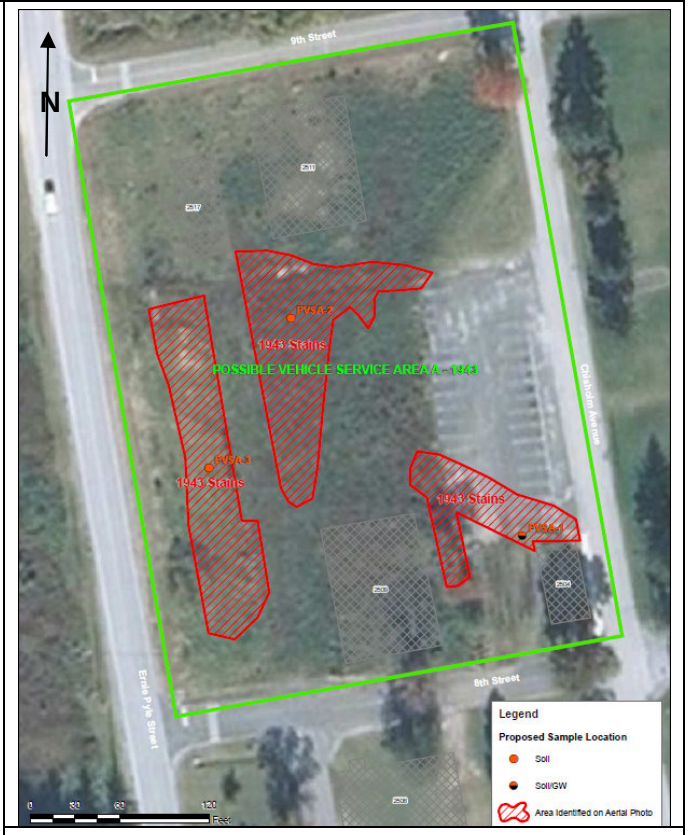
Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H4, located 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: No previous sampling has been undertaken.



Current Use: Grass field and parking lot.

Current Status: A PA/SI is underway with a recommendation to sample soil and groundwater in the areas of past staining. Three soil and one groundwater sample (from one new groundwater monitoring well) should be collected and analyzed for VOCs, SVOCs, metals, TPH-DRO and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.56 Possible Vehicle Service Area B – 1943

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study 1996

PA/SI 2010-2012

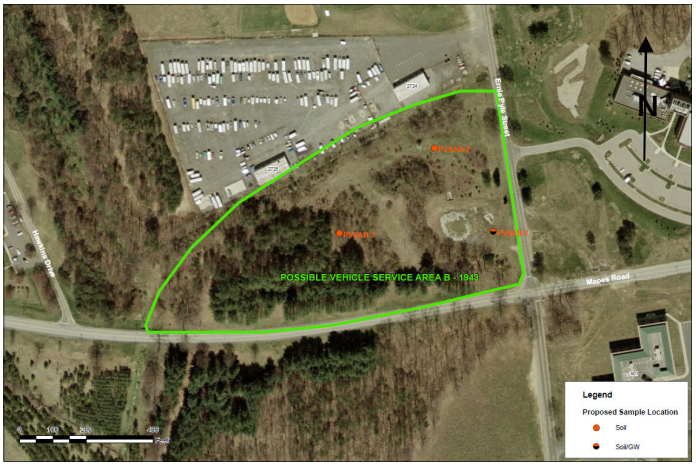
Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and Groundwater

Site Location: Grid H3, located 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.



Current Use: Tree and grass occupy this AOI.

Current Status: A PA/SI is underway with a recommendation to collect three surface soil samples, install one groundwater monitoring well, collect a groundwater sample, and analyze the soil and groundwater samples for VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.57 Former Incinerator Building – 1943 (21 ½ Street)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

EBS.....1998

Comprehensive Site Assessment.....1999

PA/SI.....2010-2012

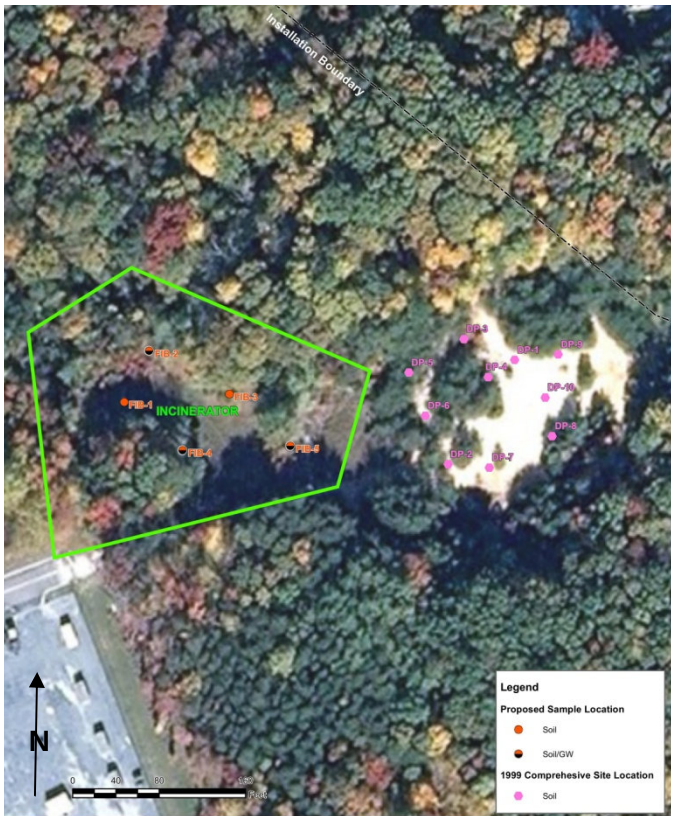
Contaminants of Potential Concern: metals and dioxins

Media of Concern: Soil and Groundwater

Site Location: Grid H1 and H2, located in the northeastern portion of the installation, 1000 feet east of the intersection of 21 ½ Street and MD 175 (Annapolis Road).

Site Description: Former Incinerator Building – 1943 was identified as an AOI because a 1998 EBS identified this AOI. 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. The outline of a building at this location 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 located west of the location sampled in the Comprehensive Site Assessment.



Current Use: None/Vacant

Current Status: A PA/SI is underway with a recommendation to collect five surface and five subsurface soil samples to be analyzed for metals and dioxins, install three groundwater monitoring wells, and analyze groundwater samples for metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.58 Stained Soils along 3rd Street

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

Initial Response 2009

PA.....2009

PA/SI.....2010-2012

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, their 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 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.

Current Use: Open field

Current Status: A PA/SI is underway with a recommendation to collect three surface soil to be analyzed for VOCs, SVOCs, and metals; install three groundwater monitoring wells, and collect and analyze groundwater samples for VOCs, SVOCs, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.1.25.59 Former Incinerator Site

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study 1996

Historical Records Review..... 2006

Subsurface Soil Investigation..... 2006

PA/SI 2010-2012

Contaminants of Potential Concern: Metals, dioxins, and furans

Media of Concern: Soil

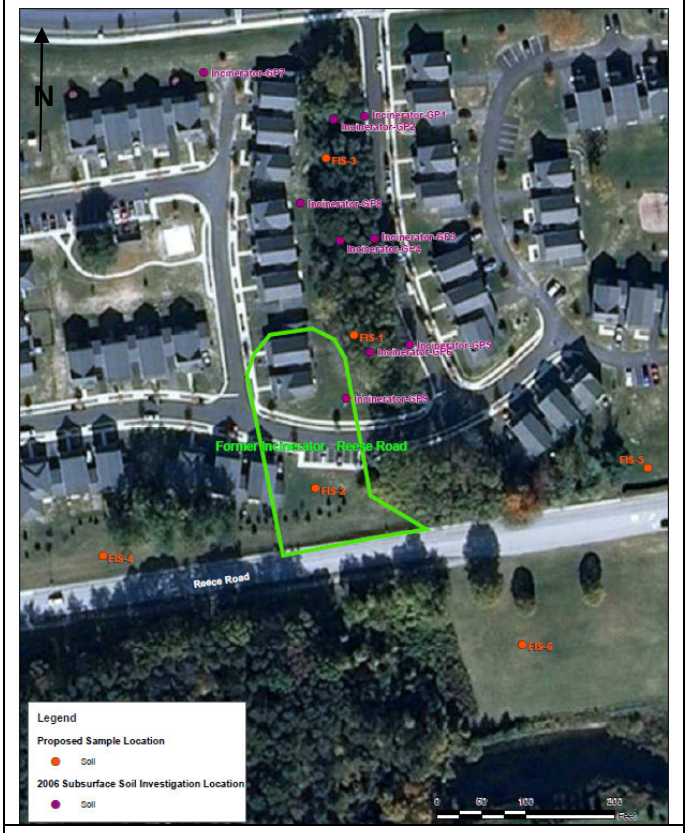
Site Location: Grid G3, located in the central part of the installation, north of Reece Road and west of the intersection of Reece Road and MacArthur Boulevard.

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 Boulevard is identified as Jessup Road; the part of Reece Road that is east of Jessup Road is identified as Portland Road and the part that is 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 HRR report (Malcolm Pirnie, 2006) 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 or 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.



Current Use: The AOI is currently developed with housing, Larkin Road, and grass cover.

Current Status: A PA/SI is underway with a recommendation to collect six surface soil samples to be analyzed for dioxins, furans, and metals.

Cleanup/Exit Strategy: Collect and analyze the chemical data. Based on the results, the AOI will either require no further action or be moved forward into the RI phase of CERCLA.

2.2 Military Munitions Response Program Open Sites

2.2.1 FGGM-003-R-01 (OU-40) – Mortar Range

2.2.1.1 FGGM-003-R-01 – Mortar Area MRS

Regulatory Driver: CERCLA

Previous Environmental Investigations

Geophysical Survey..... 2004
EBS..... 2007
SI..... 2007
RI 2008-2011
RD..... 2012

Contaminants of Potential Concern: MEC

Media of Concern: Soil

Site Location: In Grid F4, it is located in the southern portion of the Munitions Response Area (MRA), extending from Mapes Road northwest in the golf course.

Site Description: This AOI consists of the approximately 291 acre former 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 likely was discarded at the MRS, as it was uncovered in ammunition boxes, but no evidence supports the use of small arms ammunition at this MRS.

Previous Studies: Over the course of previous investigations at this site 27 surface soil samples were collected in the Mortar Area MRS.

Current Use: Golf course

Current Status: The current MRSPP for the MRS is a 7 (based on a scale from 1 to 8, 1 representing a site with the highest cleanup priority), and the baseline MEC HA for current conditions resulted in a hazard level category 4. An MRS scored in Hazard Level 4 is compatible with current and determined or reasonably anticipated future use.

Cleanup/Exit Strategy: An FS has been developed that evaluates no action, LUCs, and full clearance. It is anticipated that the PP will recommend LUCs as the preferred alternative.

2.2.1.2 FGGM-003-R-02 – Training Area MRS

Regulatory Driver: CERCLA

Previous Environmental Investigations

Geophysical Survey 2004
Baseline Survey 2004
Site Inspection 2007
Remedial Investigation 2008-2011
RD 2012

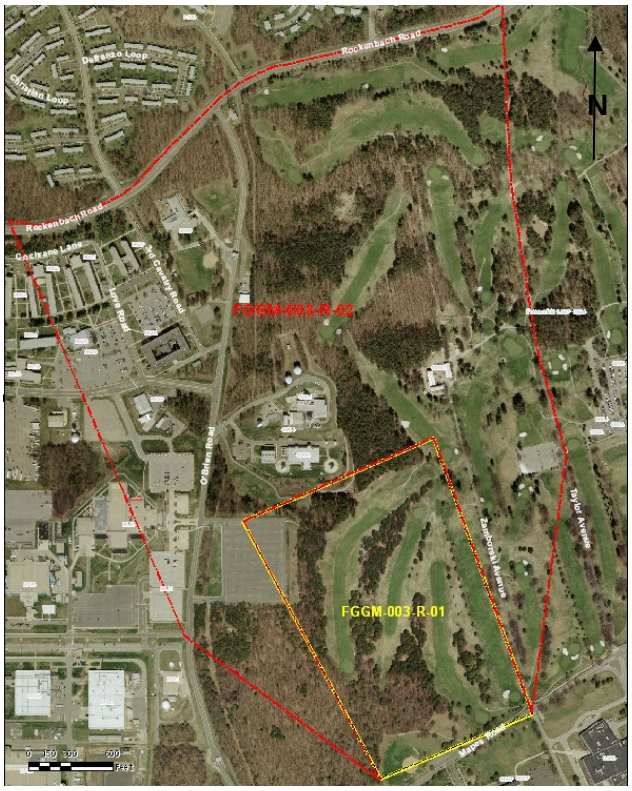
Contaminants of Potential Concern: Munitions Constituents

Media of Concern: Soil

Site Location: In Grid F4, it is located in the southern portion of the Munitions Response Area (MRA), extending from Mapes Road northwest in the golf course. The Training Area MRS boundary roughly corresponds to the Mortar Range boundary (see FGGM-003-R-01); however, the boundary was extended east to Taylor Avenue.

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.

Previous Studies: Over the course of previous investigations at this site five surface soil samples were collected in the Training Area MRS and analyzed for selected metals and explosives.



Current Use: Golf course, administrative, and education.

Current Status: The current MRSPP for the MRS is an 8 (based on a scale from 1 to 8, 1 representing a site with the highest cleanup priority), and the baseline MEC HA for current conditions resulted in a hazard level category 4. An MRS scored in Hazard Level 4 is compatible with current and determined or reasonably anticipated future use.

Cleanup/Exit Strategy: An FS has been developed that evaluates no action, LUCs, and full clearance. It is anticipated that the PP will recommend LUCs as the preferred alternative.

2.2.2 FGGM-007-R-01 (OU-44) – Inactive Landfill 2 – Tipton Army Airfield

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA 1989
SI..... 1991
RI..... 1998
DD Safety Precautions 1998
RoD..... 1999
LTMP..... 2001
Maintenance Inspection Reports.....yearly
MMRP Historical Records Review 2006
MMRP SI 2007

Contaminants of Potential Concern: MEC

Media of Concern: Soil and groundwater

Site Location: Grid E6, located in the southern portion of the Tipton Airfield Parcel (TAP) on approximately 10 acres of land north of New Tank Road (now Wildlife Loop), approximately 450 feet north and east of the Little Patuxent River.

Site Description: This AOI consists of Inactive Landfill 2 (IAL2), which was initially operated as a soil borrow area in the 1930s and 1940s. The area was subsequently operated as an unlined rubble disposal area. Use of IAL2 was limited between 1963 and 1970, but disposal activity continued after 1980.

The site could not be cleared of ordnance due to large amounts of rubble debris and wetlands. This site is currently in the MMRP.

Previous Studies: Over the course of previous investigations at this site a fence was constructed around IAL2. During the most recent inspection, the fence was intact but thick vegetation was observed on approximately 60% of the fence.

Current Use: None, grass and trees cover this AOI.

Current Status: IAL2 is inspected annually, which includes inspection of the security fence and signage.

Cleanup/Exit Strategy: The 2010 Annual Maintenance Report recommends continued inspection, north gate repair, clear vegetation from fence line, remove downed trees, and replace faded signs

2.3 Base Realignment and Closure Open Sites

2.3.1 FGGM 10 (OU-8) – Inactive Landfill 1

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA.....1989
SI 1991
RI 1998
DD Safety Precautions.....1998
RoD 1999
LTMP 2001
5 year reviews..... 2005, 2011
Maintenance Inspection Reports..... yearly

Contaminants of Potential Concern: Arsenic, benzene, 1,1,2,2-tetrachloroethane, CC14, bis(2-ethylhexyl)phthalate, iron, manganese, and naphthalene

Media of Concern: Soil and Groundwater

Site Location: Grid E5, located 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 indicating 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 UXO safety cap was installed over IAL1.

Current Use: None, grass and trees cover this AOI.

Current Status: Land use restrictions have been established and enforced that prohibit conducting any surface or subsurface excavations, digging, well drilling, or other disturbances of soil, or areas below paved surfaces. Annual LTGM has been implemented.

Cleanup/Exit Strategy: Continue the corrective measures O&M (NFA with LTGM on an annual basis) per the results of the September 2011 TAP 5-Year Final Review.

2.3.2 FGGM 20 (OU-15) – Ordnance Demolition Area

Regulatory Driver: CERCLA

Previous Environmental Investigations

SI 1994

Sampling Visits 1996, 1999, 2000, 2002, 2004

RI/FS..... 2002

FFS..... 2002

LTM 2004

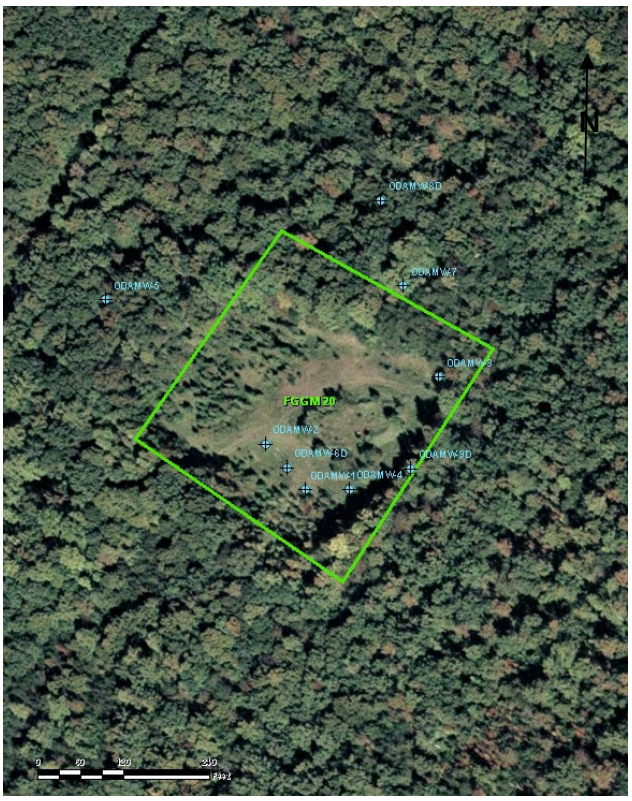
Contaminants of Potential Concern: RDX, TNT, amino-DNTs, chlorinated VOCs, cadmium and MNA parameters

Media of Concern: Soil and Groundwater

Site Location: Grid F10, located in the southern part of the BRAC parcel, in an otherwise undeveloped wooded area south of Wildlife Loop Road.

Site Description: This ODA covers 2.5 acres and is bounded by an outer berm, approximately 8 feet high, 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 is 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 LTM.



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 RAOs have been met. The Army has rescinded the 2005 Decision Document and submitted a Final Proposed Plan in FY11. A Final RoD was submitted in September 2011.

Cleanup/Exit Strategy: Eight shallow wells and three deep wells will be sampled until compliance with RAOs has been established. Future work includes continuing the corrective measures O&M in accordance with the approved ROD. In addition, 5-year reviews will be conducted to evaluate the need for continued monitoring and the ongoing effectiveness of the remedy.

2.3.3 FGGM 21 (OU-16) – Medical Waste Site

Regulatory Driver: CERCLA

Previous Environmental Investigations

SI 1994

Removal Action Report 1999

PA/SI 2010-2012

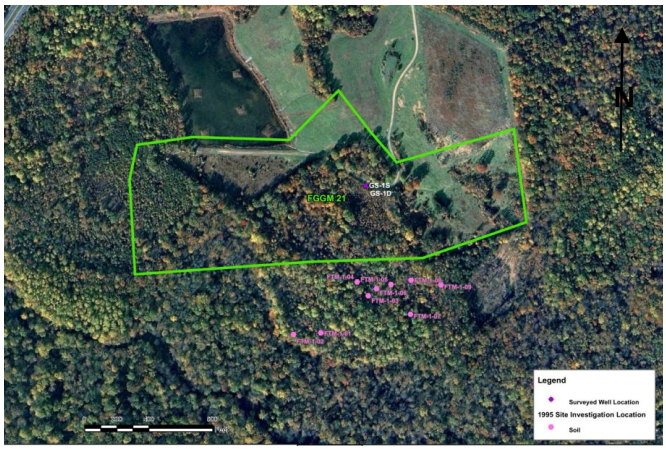
Contaminants of Potential Concern: Arsenic

Media of Concern: Soil

Site Location: Grid A7, The Medical Waste Site at the former Walter Reed Army Institute for Research (WRAIR) was located at the Walter Reed Medical Center farm located 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 one-acre.

Site Description: The former farm property was transferred from Fort Meade to the U.S. Department of the Interior (USDOI) under the BRAC program in 1991 and is currently part of the Patuxent Research Refuge-North Tract (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 noted.

Previous Studies: Over the course of previous investigations at this area of interest, 12 surface soil samples were collected and submitted for laboratory analysis.



Current Use: Unused wooded area.

Current Status: The current PA/SI recommends no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.3.4 FGGM 31 (OU-17) – Inactive Landfill 3

Regulatory Driver: CERCLA

Previous Environmental Investigations

Enhanced PA.....1989
Superfund Record of Decision.....1998
RI.....1998
RoD.....1999
5 year reviews.....2005, 2011

Contaminants of Potential Concern: Ordnance

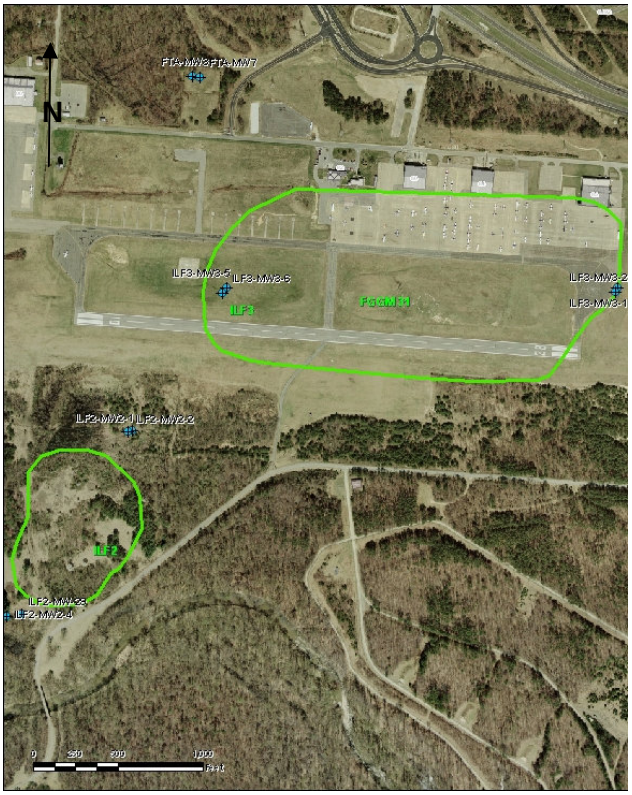
Media of Concern: Soil

Site Location: Grid E5 and F5, located in the Tipton Airfield Parcel (TAP), in the eastern portion of the runway area.

Site Description: FGGM 31 includes IAL2 and IAL3. IAL2 is an active Army site, funded under the IRP. Information about IAL2 can be found under the IRP section (section 2.1.10) of the SMP. IAL3 is a BRAC site and is discussed here.

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. The 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 subjacent to the runways.

Previous Studies: The Decision Document (U.S. Army, 1998) stated that surface sweeps will be performed at years 3 and 7, and every 5 years thereafter at the landfill to remove any potential UXO that might migrate to the surface. Ordnance sweeps were conducted in 2001, 2006, and 2011 at the IAL3.



Current Use: Runway and grassy areas.

Current Status: The ROD requires 5-year reviews, and LTGM.

Cleanup/Exit Strategy: Continue the corrective measures O&M in accordance with the June 1999 RoD.

2.3.5 FGGM 72 (OU-27) – POL Storage Tanks

Regulatory Driver: CERCLA

Previous Environmental Investigations

INV, CAP, and ISC.....1989

Soil Gas Survey 1992

PA/SI.....2010-1012

Contaminants of Potential Concern: Heating Oil

Media of Concern: Soil and Groundwater

Site Location: Grid F5, located in the northern portion of the Tipton Airfield Parcel (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, 1992). The present UST is located 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 (RA, 1992). The tank passed a leak test in May 1988.

Previous Studies: Over the course of previous investigations at this site 26 soil vapor samples were obtained.

Current Use: Unknown

Current Status: These USTs stored heating oil for use in the adjacent buildings 80 and 85, respectively. This has been confirmed in the1991 transfer assembly document and the 1998 de-registration report. The Army has transferred this property and MDE records indicate the USTs were closed in 1998. The current PA/SI recommends no further action for this AOI.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.3.6 FGGM 73 (OU-28) – Maintenance Shops Buildings 85 and 90

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA 1990

SI 1992

PA/SI.....2010-2012

Contaminants of Potential Concern: Not Determined

Media of Concern: Not Determined

Site Location: Grid E5, located 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 (RA, 1992). 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 the use of 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 the storages tanks include underground storage tanks at buildings 80 and 85. Maintenance Shop Building 90 is also part of FGGM 80 – Helicopter Hangar Area-90 because Building 90 is the Helicopter Hangar Area building.

Previous Studies: Over the course of previous investigations at these AOIs, twelve soil vapor samples were obtained around the UST at Building 85. Low level hydrocarbon contamination (e.g., maximum encountered toluene concentration, 1.6 ppm) was detected at four of the twelve vapor sampling locations (EA, 1992).

Current Use: Unknown

Current Status: The current PA/SI recommends no further action for this AOI.

Cleanup/Exit Strategy: It is recommended that FGGM 73 be administratively closed as these AOIs are already being addressed under FGGM 72 and FGGM 80.

2.3.7 FGGM 81 (OU-33) – Clean Fill Dump

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA 1989
SI..... 1992
RI .....1992 and 1998
Action Memorandum 2000-2001
PP 2000
RoD..... 2000
LTMP..... 2002
5-Year Review..... 2009
LTM Report (draft)..... 2011

Contaminants of Potential Concern: VOCs and metals

Media of Concern: Groundwater

Site Location: In Grids G7 and H7, located 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 approximately from 1972 until 1985 for the disposal of miscellaneous debris. Because the property has not yet been transferred to the DOI, this site is separate from FGGM-002-R-01.

Previous Studies: Previous studies have resulted in a RoD and LTMP with 5-year reviews.

Current Use: None, this AOI is covered in grass and trees.

Current Status: The ROD (U.S. Army, 2000b) identified the selected remedial alternative for the CFD OU (U.S. Army, 2000a) as “no further action with monitoring.” The Lower Patapsco aquifer is monitored on an annual basis.

Cleanup/Exit Strategy: Continue the corrective measures O&M (NFA with LTGM on an annual basis) per the results of the September 2011 CFD Final 5-Yr Review.

2.3.8 FGGM 82 (OU-34) – Unexploded Ordnance Removal

Regulatory Driver: CERCLA

Previous Environmental Investigations

Enhanced PA..... 1989
PA..... 1990
Ordnance Survey and Removals 1992, 1993
RA(C) 1997
Engineering Evaluation..... 2001
NTCRA Memorandum 2001
LTM 2001
NTCRA's..... 2003, 2004
OE Removal Action 2006
Recurring Review Report..... 2008

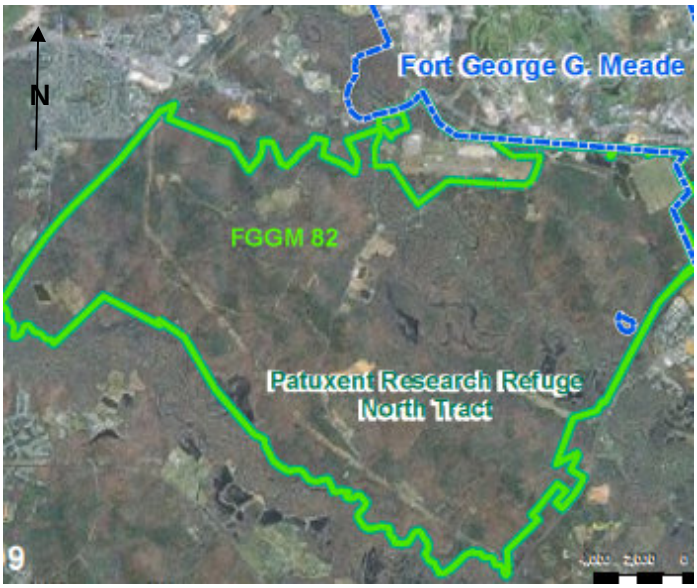
Contaminants of Potential Concern: UXOs

Media of Concern: Soil

Site Location: Grids A5 through F10, FGGM 82 covers the entire Patuxent Research Refuge-North Tract (PRR-NT).

Site Description: FGGM 82 is the Installation Restoration Program (IRP) designation for unexploded ordnance removal in the PRR-NT. FGGM-002-R-01 is the Military Munitions Response Program (MMRP) designation for Munitions and Explosives of Concern (MEC) work at the PRR-NT.

Previous Studies: The *Amendment to Explosives Safety Submissions for Tipton Army Airfield, Fort Meade, Maryland* (FGGM, 1997) states that the surface of the river bed will be swept yearly and will be included in the recurring review. Several sweeps of the PRR-NT occurred in the past and in 2001, an Action Memorandum selected LUCs with surface and subsurface clearance to depth in selected areas. A Non-Time Critical Removal Action (NTCRA) was completed for 24 areas located within the PRR-NT identified by the USFWS as high traffic areas. LUCs include the education of workers and recreational users regarding potential residual OE hazards that may be associated with the property and identification of proper notifications if any OE is encountered.



Current Use: Patuxent Research Refuge

Current Status: The Army intends to prepare a consensus letter that will propose NFA for this site.

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 UXO issues) will still be addressed under FGGM-002-R-01 after FGGM 82 is administratively closed.

2.3.9 FGGM 85 (OU-35) – UXO Tipton Army Airfield

Regulatory Driver: CERCLA

Previous Environmental Investigations

RoD.....1999

Historical Records Review 2006

5 year review.....2011

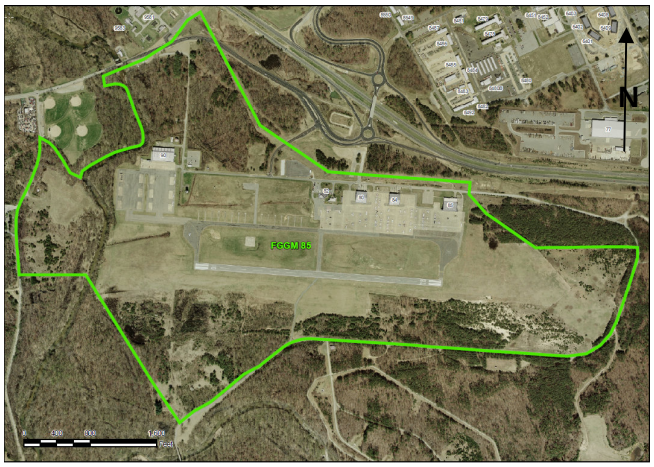
Contaminants of Potential Concern: UXOs

Media of Concern: Soil and Groundwater

Site Location: Grid E5, located east of State Route 198 and south of State Route 32.

Site Description: This AOI is comprised of sites HHA, 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 UXO safety cap was installed over IAL1, a fence is installed and maintained around IAL2, and surface sweeps for UXO have been conducted in IAL3.



Current Use: Airfield

Current Status: Annual inspections of the earthen cap and annual sweeps of a portion of the Little Patuxent River are conducted. 5-year reviews are conducted, as well as LTM inspections of IAL1 and IAL2, and UXO sweeps of the Little Patuxent River and IAL3.

Cleanup/Exit Strategy: Continue to meet the requirements of the July 1998 Decision Document. MEC sweeps and inspections will continue for the foreseeable future. Unlike the LUCs, the need for river sweeps is evaluated annually. The Army will develop an ESD that will address the needs for sweeps of ordnance, appropriate disposal of ordnance and appropriate disposal of ordnance if discovered, and LUCs requirements to ensure the continued protectiveness of the UXO removal action at TAP.

2.3.10 FGGM 94 (OU-37) – Trap and Skeet Range 17

Regulatory Driver: CERCLA

Previous Environmental Investigations

Ordnance Survey..... .1995
Site-Wide Groundwater Study 1999
Ecological Risk Assessment..... 2004
Statement of Work for RI 2008
RI/FS 2011

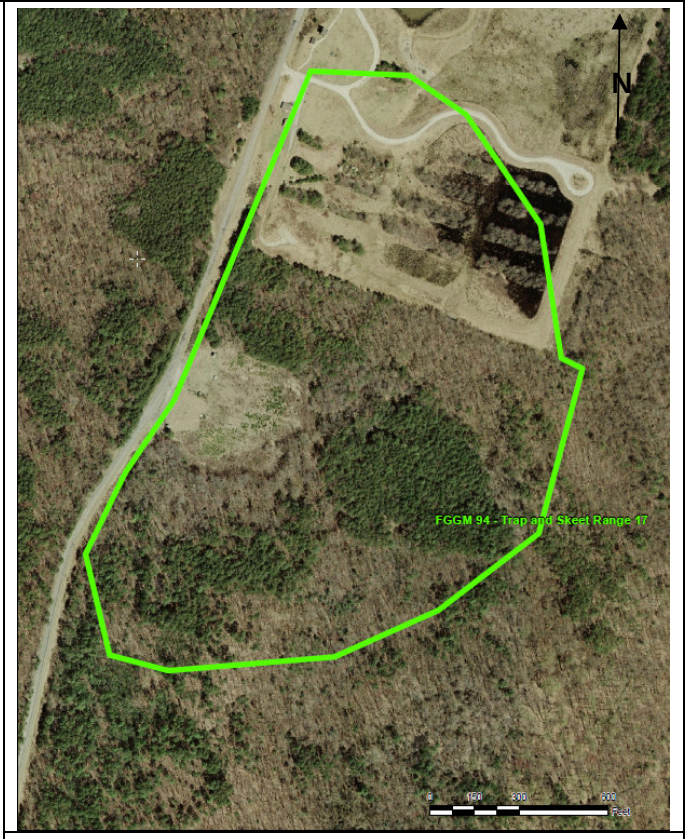
Contaminants of Potential Concern: Lead

Media of Concern: Soil

Site Location: Grid D7, located in the central portion of the Patuxent Research Refuge-North Tract (PRR-NT)

Site Description: This AOI is comprised 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, low house, cement walkways, and a rather heavily forested area.

Previous Studies: Over the course of previous investigations at this site, 10 soil samples were tested for TAL metals. Groundwater was not sampled.



Current Use: Unused, grass and trees covered.

Current Status: An RI/FS is currently underway to determine human health and ecological risk per CERCLA, the NCP, and Army procedures.

Cleanup/Exit Strategy: Future work includes a Remedial Design phase and Remedial Construction.

2.3.11 FGGM-001-R-01 (OU-38) – Clean Fill Dump

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA 1989
SI..... 1992
RI .....1992 and 1998
Action Memorandum 2000-2001
PP 2000
RoD..... 2000
LTMP..... 2002
5-Year Review..... 2009
LTM Report (draft)..... 2011

Contaminants of Potential Concern: VOCs and metals

Media of Concern: Groundwater

Site Location: In Grids G7 and H7, located 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 1985 for the disposal of miscellaneous debris. Because the property has not yet been transferred to the DOI, this AOI is separate from FGGM-002-R-01.

Previous Studies: Previous studies have resulted in a RoD and Long Term Monitoring Plan (LTMP) with 5-year reviews.

Current Use: None, this AOI is covered in grass and trees.

Current Status: The ROD (U.S. Army, 2000b) incorporates the Action Memorandum (July 2000) which addresses the risks related to unexploded ordnance (UXO) at the CFD and protects human health and the environment. The Action Memorandum includes the establishment and enforcement of UXO land use restrictions.

Cleanup/Exit Strategy: The Army intends to transfer the property to DOI in FY12. After transfer, FGGM 001-R-01 will be administratively closed and UXO related work at the CFD will be associated with FGGM 002-R-01 - High Explosive Impact and Disposal (HEI) Area. A PP, ROD, and land use control implementation plan (LUCIP) will be submitted in FY12 for the HEI Area to better enforce and maintain the existing UXO LUCs at the PRR-NT parcel, which includes the CFD OU.

2.3.12 FGGM-002-R-01 (OU-39) – High Explosive Impact and Disposal Area

Regulatory Driver: CERCLA

Previous Environmental Investigations

Ordnance Survey..... 1992-1993

Engineering Evaluation..... 2001

UXO Survey..... 2001

RA Draft..... 2008

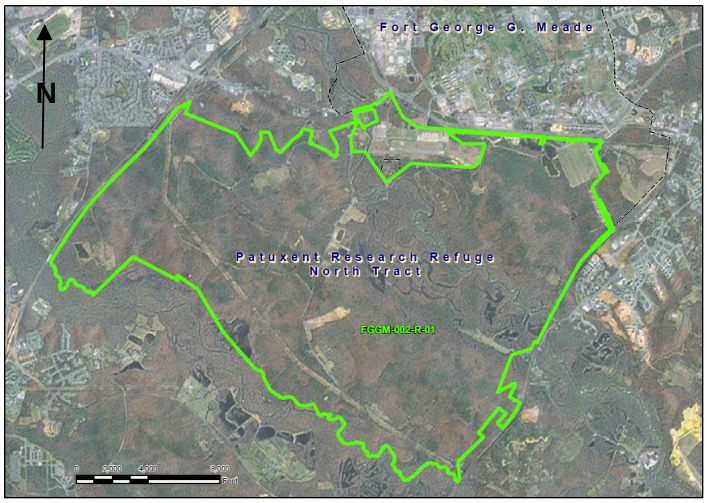
Contaminants of Potential Concern: MEC and MC

Media of Concern: Soil

Site Location: In Grids B5-H5, A6-I6, A7-H7, C8-G8, C9-G9, D10-G10; FGGM-002-R-01 consists is the approximately 8,100-acre Patuxent Research Refuge-North Tract (PRR-NT), located 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 500 acres. Both areas were transferred to the DOI in the early 1990s. Numerous ordnance and explosive (OE) training and UXO 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 UXO located on the surface and within a depth of 6-inches below ground surface.



Current Use: Wildlife refuge

Current Status: A Non-Time Critical Removal Action was completed for 24 areas located within the PRR-NT identified by the USFWS as high traffic areas. A 2001 Action Memorandum selected LUCs with surface and subsurface clearance to depth in selected areas.

Cleanup/Exit Strategy: Continue measures outlined by the LUCs, including the education of workers and recreational users regarding potential residual OE hazards that may be associated with the property and identification of proper notifications if any OE is encountered. The Army intends to develop a PP/RoD for UXO on the 8,100 acre PRR-NT property in FY12. A LUCIP will also be developed to better enforce and maintain the existing UXO LUCs at the PRR-NT.

2.4 Unassigned Open Sites

2.4.1 6-Acre Little Patuxent River Site

Regulatory Driver: CERCLA

Previous Environmental Investigations

ECP Final.....2011

PA/SI.....2010-2012

Contaminants of Potential Concern: Not Determined.

Media of Concern: Soil and Groundwater

Site Location: Grid G8 and H8, located adjacent to the southeast corner of the PRR-NT, separated by railroad tracks.

Site Description: This AOI is comprised of undeveloped land. The Patuxent Road traverses the site. There is no indication that the site is currently or has been used as an operational range due to its location.

Previous Studies: There has been no sampling by previous studies

Current Use: Unknown/undeveloped land

Current Status: A Final ECP was completed in FY11 and approved by regulatory agencies. A Record of Environmental Consideration (REC), Finding of Sustainability Of Transfer (FOST), and Decision Report (DR) will be completed in FY12 and the property will be transferred to Anne Arundel County.

Cleanup/Exit Strategy: No further action is recommended for this AOI.

2.4.2 Off-Post Groundwater Investigation--Nevada Avenue Area

Regulatory Driver: CERCLA

Previous Environmental Investigations

Interim Measures 2009-2011

Groundwater Investigation…….2011-2013

Contaminants of Potential Concern: VOCs

Media of Concern: Groundwater

Site Location: The area surrounding Nevada Avenue, Odenton, MD

Site Description: The Nevada Avenue Area is comprised 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 and planned monitoring wells in both on- and off-post areas. The area is approximately nine-tenths of a 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, located along the southeastern boundary of FGGM, and are ongoing. As required by the USEPA, during the Interim Measures activities, sixty-two private wells were sampled within a one-mile radius of MW-125d/123s and MW-126d/124s. PCE near or exceeding the USEPA maximum contaminant level (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 are 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 USEPA MCL; therefore, PCE was determined to be the primary contaminant of concern for the investigation.

Current Use: Residential, light industrial, commercial

Current Status: A groundwater investigation is ongoing with field activities scheduled to begin in late-2011. Five deep monitoring wells and two shallow monitoring wells will be installed within the Study Area. Two rounds of groundwater sampling will be conducted at each of these wells. Nineteen existing monitoring wells will be gauged to determine groundwater flow direction. Monthly sampling of three private wells (on-going since 2009) will continue throughout the investigation. Bottled water service that began to Odenton residents in 2009 has also been continued.

Cleanup/Exit Strategy: Perform groundwater investigation to determine if the contamination is emanating from Fort Meade. Monitoring will continue throughout the investigation and beyond depending upon the outcome of the investigation. An exit strategy will be determined based upon the outcome of the investigation.

2.5 Installation Restoration Program Sites Designated for No Further Action

2.5.1 FGGM 05 (OU-2) – Troop Boiler Plant

Regulatory Driver: CERCLA

Previous Environmental Investigations

Evaluation of Groundwater System..... 1996

Groundwater Monitoring 2001

Well Removal/Replacement..... 2002

Groundwater Sampling Event..... 2008

Site Model and Assessment Report..... 2008

PA/SI 2010-2012

Contaminants of Potential Concern: BTEX, MTBE, Naphthalene, caustic soda, sodium sulfite, phosphates, sodium hydroxide

Media of Concern: Soil and Groundwater

Site Location: Grid F5, located in the southwestern portion of the base 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. OWS-14 and WR-14 (SWMU 114). Storage shed (no building number) used to store 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 sampling from eight wells occurred in March, April, August, and October 2008, and four BioSok® booms were inserted into MWs.

Current Use: Unknown/designated as "industrial/installation support" in May, 2005

Current Status: On December 9, 2009 MDE OCP issued a Notice of Compliance for FGGM 05 based on site conditions meeting site remedial objectives and seven MDE MEAT risk factors.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.2 FGGM 36 (OU-20) – Photographic Laboratory, Building 4553

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU 1996

Historic Aerial Photograph Study.....1996

RFA 3rd phase.....1999

Data Gap Investigation.....2002

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid G4, Building 4553 is located in the southeastern portion of the installation, northwest of the intersection of Llewellyn Avenue and Cooper Avenue.

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 during the SWMU study (BCM, 1996).

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 USEPA 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 (USEPA 1996).

Current use: Unknown

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.3 FGGM 95 (OU-45) – Former Landfill Sites

2.5.4 Possible Dump Site C – 1957

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

Geophysical Investigation 2004

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified.

Media of Concern: None identified.

Site Location: Grid F2, Possible Dump Site C-1957 was located within 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 photographic 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 unassociated with utilities (Versar, 2004a). There is little geophysical evidence to suggest that this AOI is a former dump or landfill.

Current use: Grass, trees, portions of Evans Court and Leslie Road, and buildings.

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.4.1 Possible Dump Site D – 1957

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

Geophysical Investigation 2004

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified.

Media of Concern: None identified.

Site Location: Grid F2, Possible Dump Site D-1957 was located 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 photographic 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 1957D encompasses Riordan Court and the lawns and driveways associated with 4 small houses.

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.4.2 Possible Dump Site F – 1957

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

Geophysical Investigation 2004

PA/SI.....2010-2012

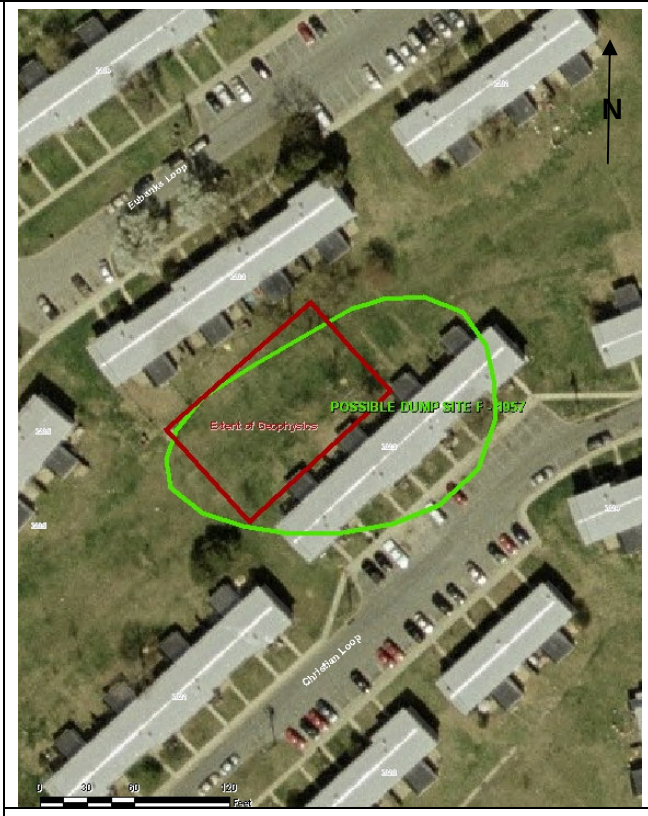
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid E3, Possible Dump Site F-1957 was located 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 photographic study of the base 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).



Current use: The AOI is currently a grass lawn bordered to the north and south by townhouses.

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.4.3 Site M Parcel 4

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study..... 1996

EBS.....2004

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F3, located east and west of Taylor Avenue along Applewood golf course holes 11 and 12.

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: Golf Course

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: This AOI requires no further action.

2.5.4.4 Site M Parcel 5 Concrete Pit/Telephone Pole

Regulatory Driver: CERCLA

Previous Environmental Investigations

Aerial Photographic Investigation..... 1996

EBS 2004

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F3, adjacent to the former farm house north of Applewood Golf Course hole 10, in the central portion of the installation.

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 an old out building located 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: Golf Course

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: This AOI requires no further action.

2.5.4.5 Site M Parcel 6 Historic Ground Scar

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study..... 1996
Geophysical Survey.....2004
EBS 2004
PA/SI.....2007
PA/SI.....2010-2012

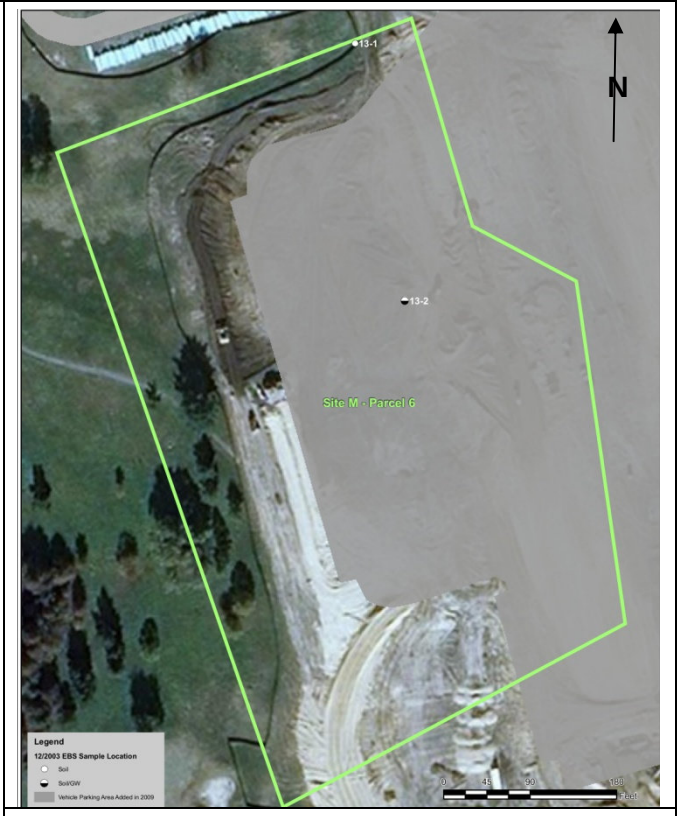
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F3/F4, located in the southeast portion of Applewood Golf Course.

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 area of interest at this location. In the sandy coastal plain sediments typical of this location, ground disturbance can be easily accomplished 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 has covered this location in most of the historic aerial photographs. The ground disturbance/scarring could be due to 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.



Current use: Golf Course

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: This AOI requires no further action.

2.5.4.6 Site M Parcel 9

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

EBS 2004

PA/SI.....2007

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified

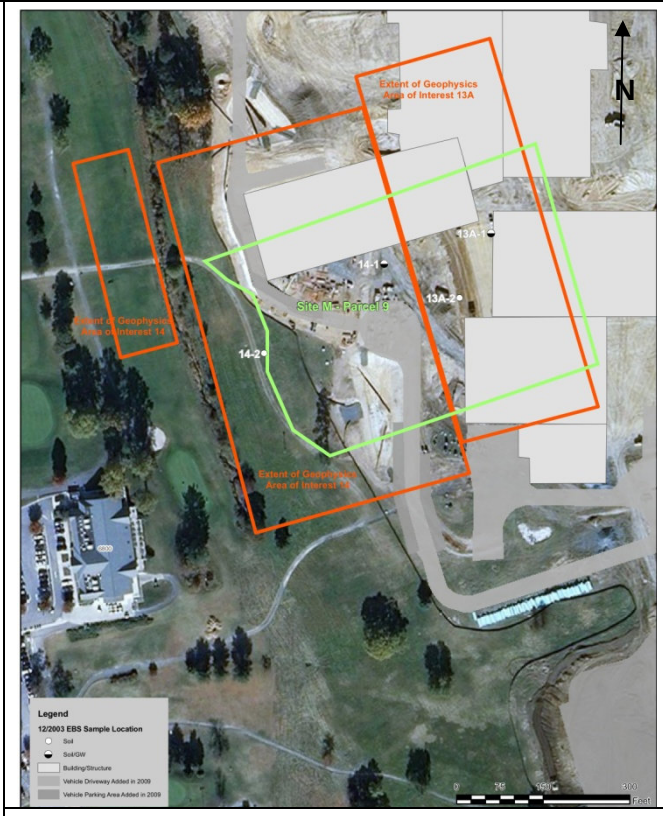
Media of Concern: None identified

Site Location: Grid F3, located in the east-central portion of the golf course, which is located in the central portion of the installation.

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 were not identified at this location in the EPA (1996) historic aerial photographic study of the installation.

Previous Studies: A geophysical investigation (Berger EA, 2004) was conducted to investigate the disturbed ground and ground scarring. The geophysical investigations of this area revealed some anomalies. Those anomalies that could not be attributed to utilities or the cart path were investigated by four subsurface soil samples and two groundwater samples.

Over the course of previous investigations at this site, four subsurface soil samples and two groundwater samples were collected and analyzed.



Current use: Golf Course

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: This AOI requires no further action.

2.5.5 FGGM 96 (OU-46) – Former Motor Pools, Wash Racks, and Buildings

2.5.5.1 Building 294 Former Motor Pool (SWMU 10)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996
Historic Aerial Photograph Study.....1996
SI 1999
Data Gap Investigation.....2002
PA/SI.....2010-2012

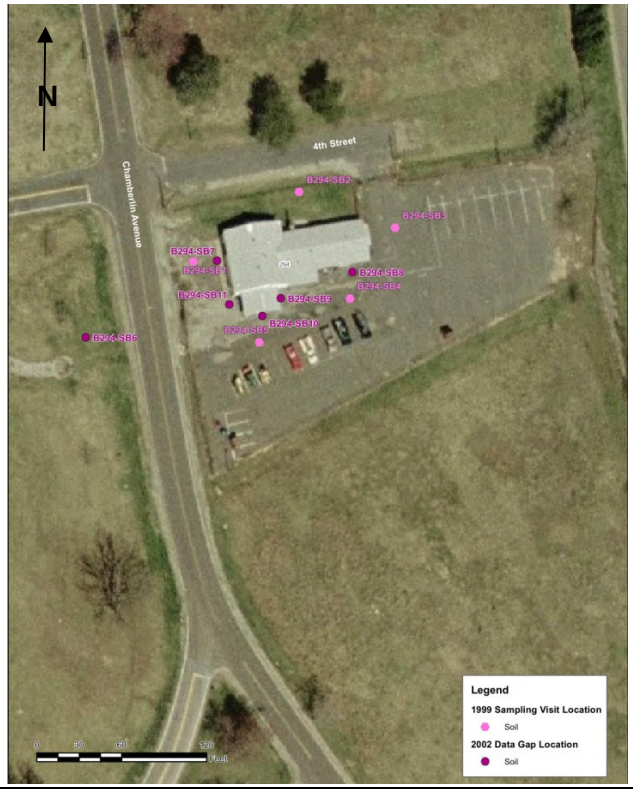
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H4, Building 294 is located 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. WP-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 storage and mixing of pesticides takes place. 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.



Current Use: Unknown.

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.5.2 Building 1251 and Associated Wash Rack and Oil/Water Separator

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Sampling Visits ..... 1999 and 2001

SI 2001

PA/SI..... 2010-2012

Contaminants of Potential Concern: None identified

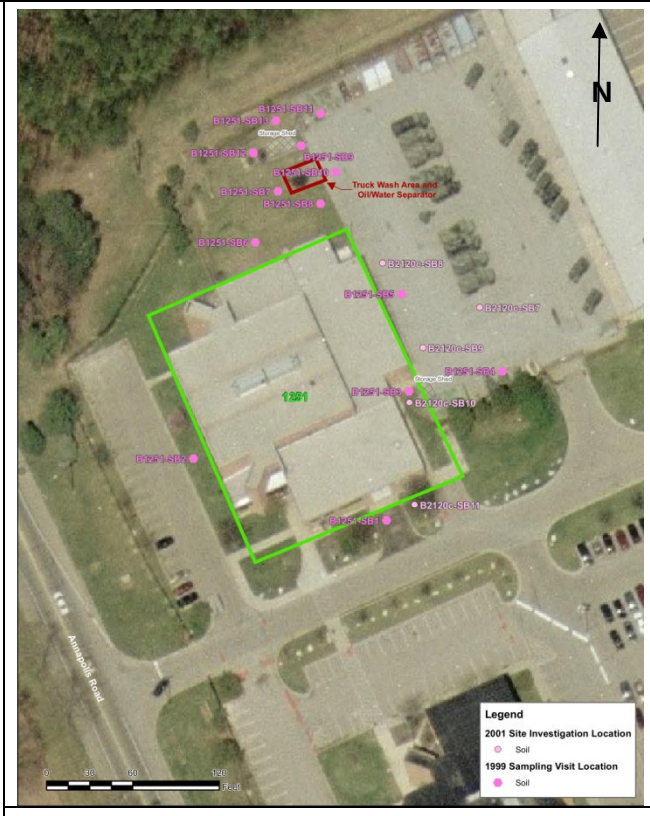
Media of Concern: None identified

Site Location: Grid G1. Building 1251 is located 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 there was systematic discharge of wash water into the OWS from the WR (BCM, 1996).

The maintenance shop within the building utilizes and stores small quantities of lube oil, waste oil, brake fluid, and antifreeze. Four storage sheds, two formerly located near Building 1251 and two on the east side of Building 1252, were used for storage of hazardous materials and petroleum products; the sheds were removed in the late 1990s.

Previous Studies: Over the course of previous investigations at this AOI, 4 surface and 16 subsurface soil samples (plus 1 duplicate subsurface soil sample) were collected and analyzed.



Current Use: Administrative functions and storage of military vehicles and equipment, and a portion of the building is used for minor vehicle maintenance.

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.5.3 Building 2121 Vehicle Maintenance

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Sampling Visits 1999

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified

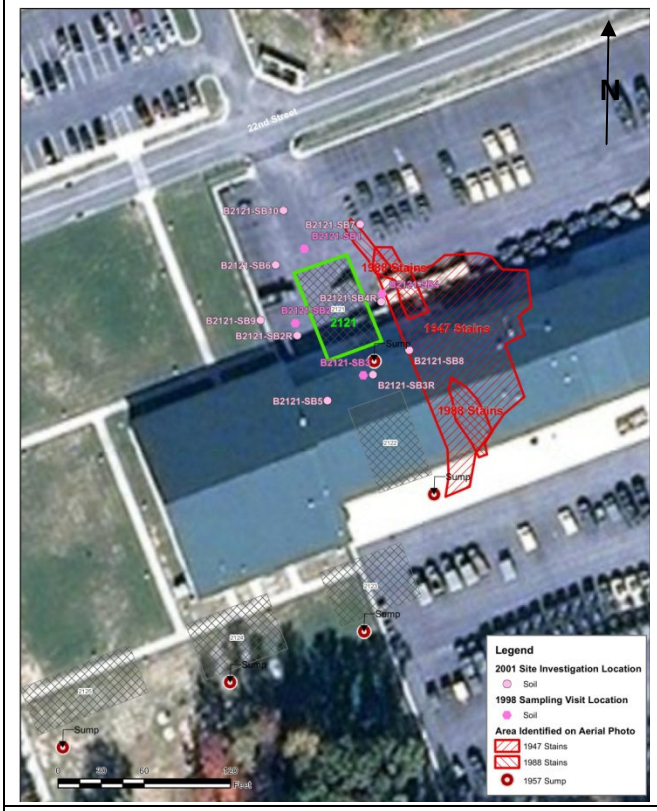
Media of Concern: None identified

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. Building 2121 was identified as two SWMU facilities in the 1996 SWMU study (BCM, 1996) because of its more recent use for maintenance and repair of equipment (SWMU 29) and because of its operation as a vehicle and small engine maintenance repair facility in the past (SWMU 30). 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, six surface and 13 subsurface soil samples were collected and submitted for laboratory analysis.



Current Use: Unknown

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.5.4 Former Building 2122 (SWMU 31)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Historic Aerial Photograph Study.....1996

Sampling Visits 1999

PA/SI.....2010-2012

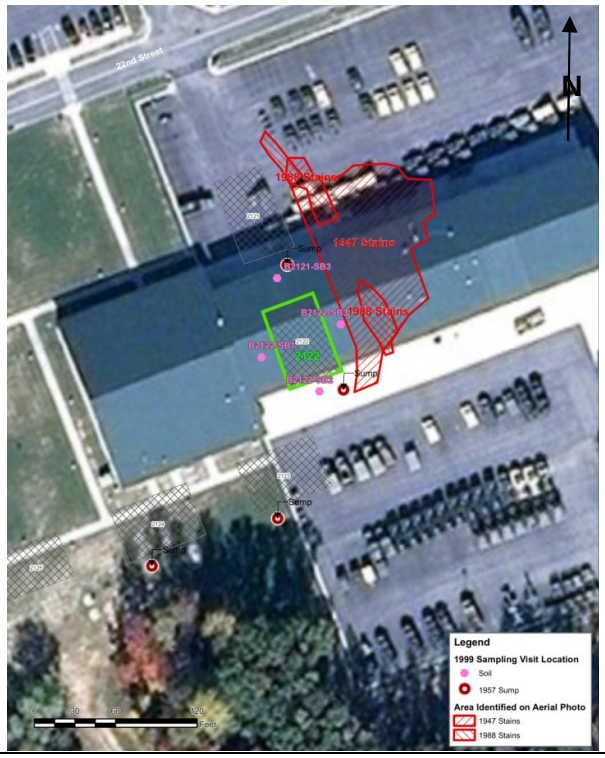
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H2, Former Building 2122 was located 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 by BCM during the SWMU study (BCM, 1996). Former Building 2122 was constructed in 1941 and used as a vehicle maintenance facility until 1975, for camouflage painting from 1975 to 1978, and for storage of 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.



Current Use: Unknown

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.5.5 Former Building 2123 (SWMU 32)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Sampling Visits 1999

PA/SI.....2010-2012

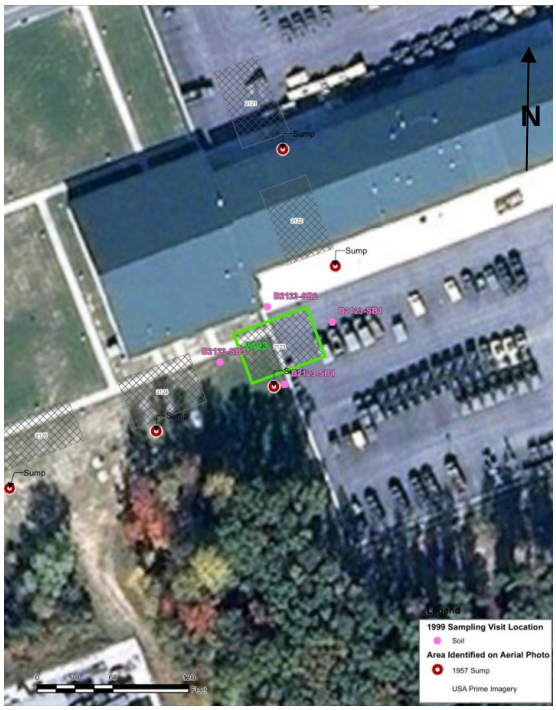
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H2, Former Building 2122 was located 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 was used 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.



Current Use: Parking lot and grassy area.

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.5.6 Building 2124 (SWMUs 33 & 34)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Sampling Visits 1999

PA/SI.....2010-2012

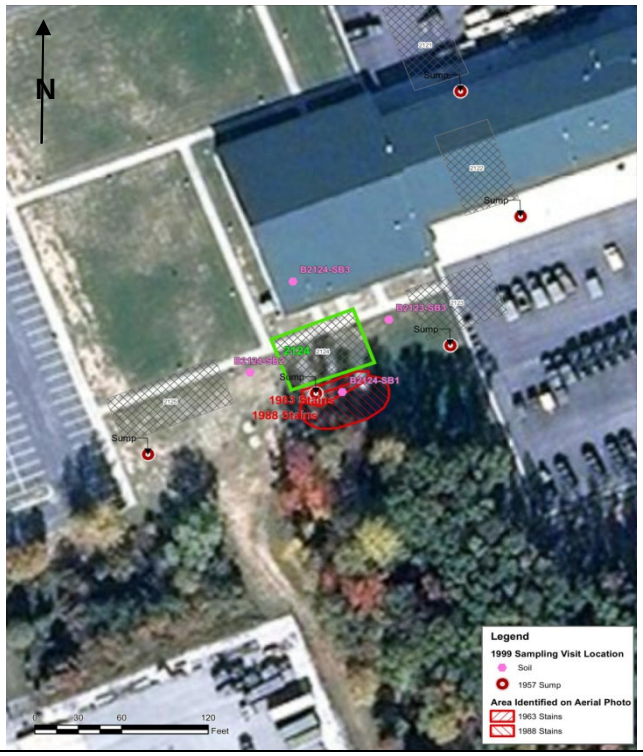
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H2, Building 2124 is located 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 by BCM during the SWMU study (BCM, 1996).

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.



Current Use: Trees and grass

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.5.7 Former Building 2287

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

RFA 3rd Phase.....1999

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H5, located in the southeastern portion of the installation, in the northeast corner of the intersection of Morrison and Wilson Streets

Site Description: Former Building 2287 - NSA Motor Pool 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 Department of Logistics Allied Trades. In 1996, the NSA 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: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: This site has been proposed for NFA in a Consensus Letter document and this document is currently under regulatory review.

2.5.5.8 Building 2484 Medical Supply/Administration (SWMU 73)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study..... 1996

Sampling Visit..... 2000

PA/SI..... 2010-2012

Contaminants of Potential Concern: None identified None identified

Media of Concern: None identified

Site Location: Grid H4, located in the southeastern portion of the installation, approximately 250 feet northwest of the intersection of Ernie Pyle Street and 4th Street.

Site Description: Building 2484 was a warehouse/administrative building that 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 within the 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.

Current Use: Unknown

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.5.9 Former Building 2831 Dental Clinic

Regulatory Driver: CERCLA

Previous Environmental Investigations

EIS 1997

SWMU Study..... 1996

Historic Aerial Photograph Study 1996

Sampling Visit..... 2000

PA/SI 2010-2012

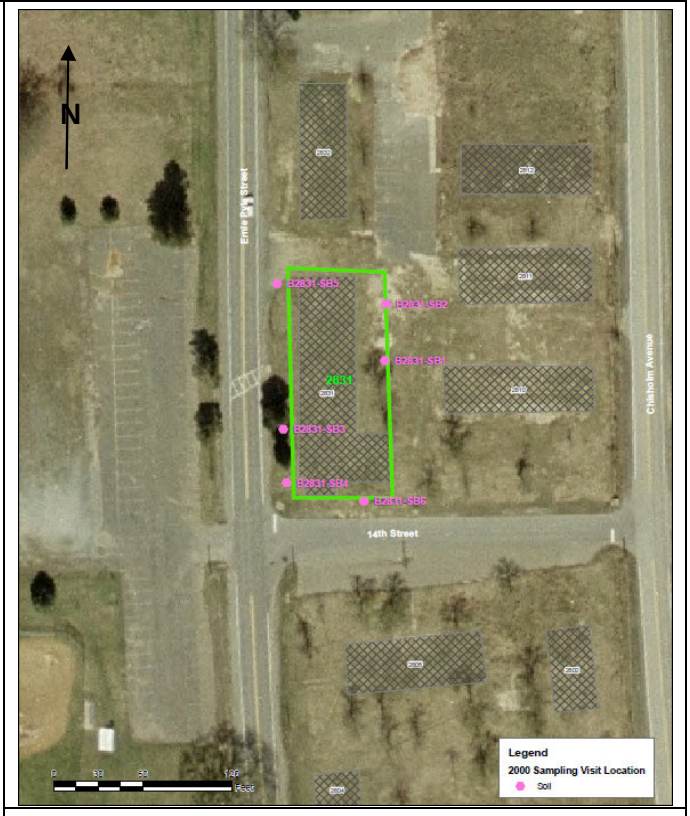
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H3, Building 2831 was formerly located 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 dentist clinic, an x-ray processing lab, and chemical storage. There were two silver recovery units inside the building. Waste water 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.



Current Use: Vacant, grass covered lot.

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.5.10 Building 4552 -- (Non-SWMU 10)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

SWMU Study 1996

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid G4, located in the southeastern portion of the installation (Figure B4552-1), northwest of the intersection of Llewellyn Avenue and Cooper Avenue.

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).

Current Use: Unknown

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.5.11 Building 4554 Photo Lab (SWMU 100)

Regulatory Driver: CERCLA

Previous Environmental Investigations

EIS 1977

SWMU Study..... 1996

Sampling Visit..... 2000

PA/SI 2010-2012

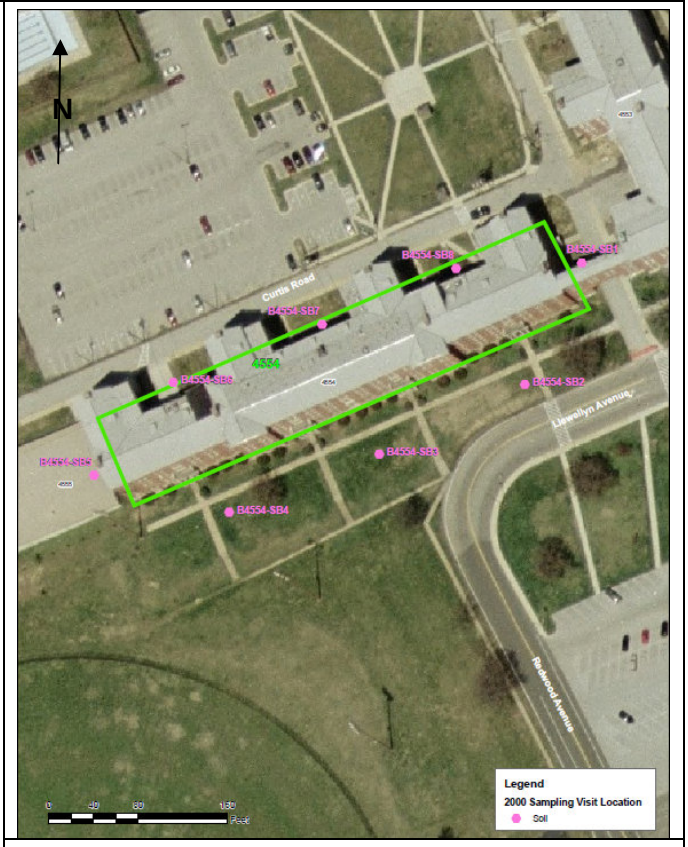
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid G4, located 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 which largely 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.

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.



Current Use: Unknown

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.5.12 Building 6800 Wash Rack System for current Golf Course Club House

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Historic Aerial Photograph Study.....1996

Sampling Visits 1998-1999

Data Gap 2002

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F3, located on the golf course in the central portion of the installation at 6800 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 current Golf Course Club House. The WR associated with the current 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, is located directly south of Building 6800, and is addressed as a separate site.

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.

Current Use: Golf course

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: This AOI requires no further action.

2.5.5.13 Building 8472 Dental Clinic (SWMU 109)

Regulatory Driver: CERCLA

Previous Environmental Investigations

DEIS 1977

SWMU Study 1996

Sampling Visit 2000

PA/SI 2010-2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F4, located 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 are stored in a locked room in several flammable materials cabinets and on storage shelves.

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

Current Use: Unknown

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI. Given the history as a dental clinic, mercury contamination of the building should be ruled out if and when the building is reused.

2.5.5.14 Former Buildings 2454, 2455, 2456, and 2457 (Non-SWMUs 1, 2, 3, and 4)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H4, located in the southeastern portion of the installation, in the northeast quadrant of the intersection of Wilson Street and 4½ Street.

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 later served as the Community Counseling Center for social drug rehabilitation.

Former Building 2457 later 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 over the course of previous investigations. The 1996 SWMU study did not identify these AOIs as SWMUs, and it recommended no further action. The Fort Meade Environmental Partnership approved this AOI for no further action 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).

Current Use: Grassy field.

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.5.15 Former Building 2801 Storehouse and 1941 Administrative (Non-SWMU 5)

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H3, located 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 picked up by 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 no further action 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 over the course of previous studies at this AOI.

Current Use: Grass field.

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.5.16 Buildings 9802 and 9803 Barracks and Administrative

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study.....1996

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

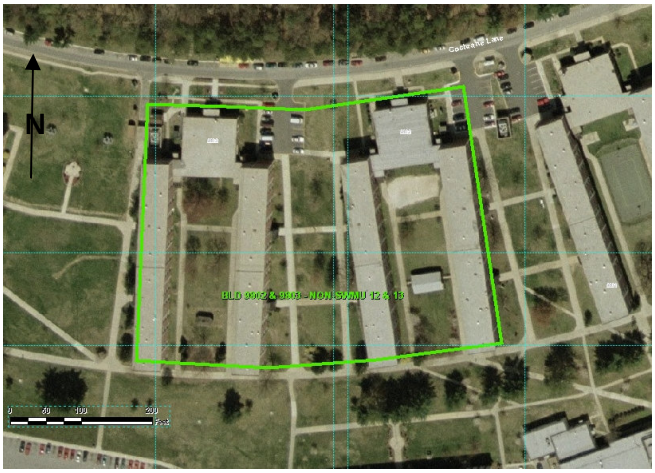
Contaminants of Potential Concern: Not Determined

Media of Concern: Not Determined

Site Location: Grid E3, located 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).



Current Use: Barracks and administrative.

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.5.17 SWMUs 141 and 142 – Privately Owned Vehicles Wash Rack

Regulatory Driver: CERCLA

Previous Environmental Investigations

SWMU Study 1996

Historic Aerial Photograph Study.....1996

RFA 3rd Phase.....1999

PA/SI.....2010-2012

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 wash rack 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 wash rack (SWMU 142) to the oil/water separator (SWMU 141) (BCM, 1996). The wash rack was in use during the 1999 RFA for washing of 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.

Current Use: Grass and trees occupy this AOI.

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.5.18 Oil Tanks

Regulatory Driver: CERCLA

Previous Environmental Investigations

Historic Aerial Photograph Study.....1996

PA/SI.....2010-2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid E3/E4, located 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) nor the EPA (1996) historic aerial photographic 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.

Current Use: Oil tanks

Current Status: The current PA/SI recommended no further action for this AOI and EPA concurred.

Cleanup/Exit Strategy: No further action is required for this AOI.

2.5.6 Grant Street at Building 8484 – Spill Notification

Regulatory Driver: CERCLA

Previous Environmental Investigations

Reportable Spill Notification..... 2009

Spill Notification Response 2010

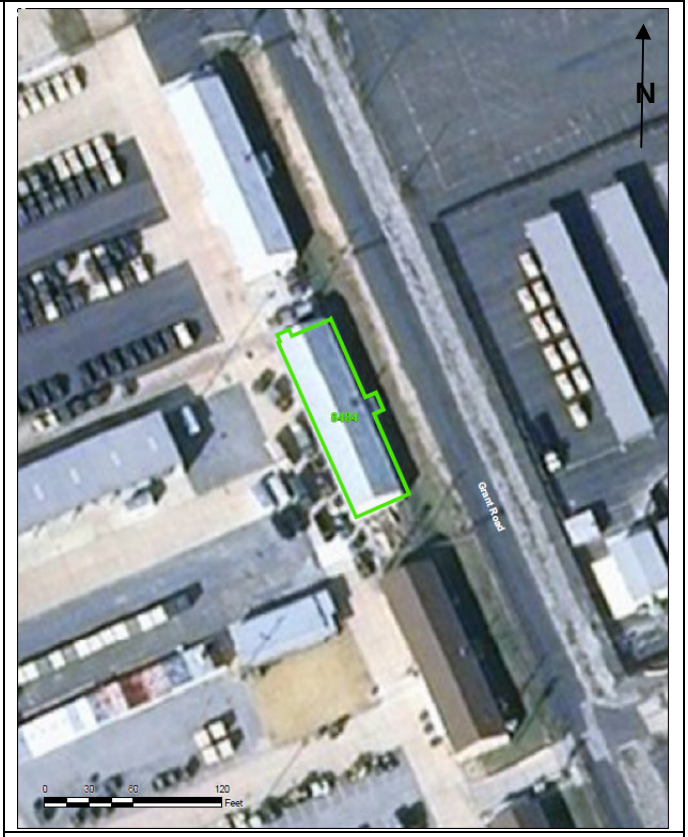
Contaminants of Potential Concern: Not Determined

Media of Concern: Soil

Site Location: Grid F5, located in the southwestern portion of the base 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 from the bottom of the trench was collected.



Current Use: Roadway shoulder.

Current Status: On June 7, 2010, the 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: No further action is required for this AOI.

2.5.7 20th Street at Route 175 near Building 1978 – Spill Notification

Regulatory Driver: CERCLA

Previous Environmental Investigations

Reportable Spill Notification..... 2009

Spill Notification Response..... 2010

PA/SI..... 2010-2012

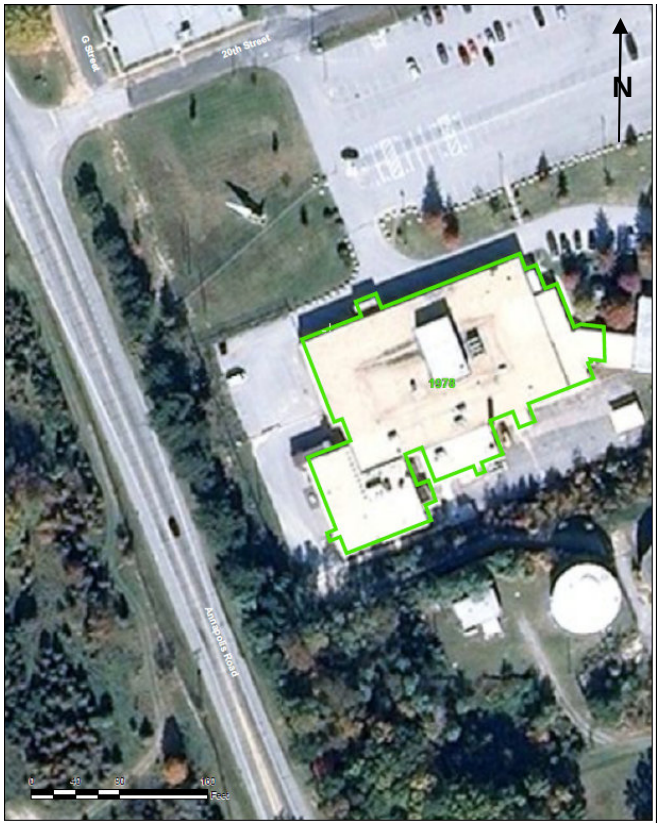
Contaminants of Potential Concern: Not Determined

Media of Concern: Soil

Site Location: Grid H2, located in the northeastern portion of the base along Route 175 and 20th Street near Building 1978

Site Description: Discolored soil in a duct bank trench excavated along Route 175 and 20th Street beginning approximately 2 ft. 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 from the bottom of the trench was collected for analysis.



Current Use: Grass field.

Current Status: On June 7, 2010, the 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: No further action is required for this AOI.

2.5.8 1st Street in front of Building 195 – Spill Notification

Regulatory Driver: CERCLA

Previous Environmental Investigations

Reportable Spill Notification..... 2009

Spill Notification Response 2010

PA/SI 2010-2012

Contaminants of Potential Concern: Not Determined

Media of Concern: Soil

Site Location: Grid H5, located in the southeastern portion of the base 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 from the bottom of the trench was collected for analysis

Current Use: Roadway shoulder.

Current Status: On June 7, 2010, the 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: No further action is required for this AOI.

2.6 Military Munitions Response Program Sites Designated for No Further Action

2.6.1 FGGM-004-R-01 (OU-41) – Grenade & Bayonet Range A

Regulatory Driver: CERCLA

Previous 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, located 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 is comprised of the former suspected Grenade and Bayonet Range A, which was suspected to be in use from 1924 until the late 1930s. Hand grenades are assumed to have been used onsite 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 detected metals above the regulatory limits, and no explosives were detected.

Current Use: Administrative and recreational.

Current Status: There is no physical evidence of UXO or munitions debris on the MRS.

Cleanup/Exit Strategy: No further action is required.

2.6.2 FGGM-008-R – Grenade & Bayonet Range B

Regulatory Driver: CERCLA

Previous 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, located in the northeastern portion of the installation.

Site Description: This AOI is comprised of the former suspected Grenade and Bayonet Range B, which was suspected to be in use in 1943. Hand grenades are assumed to have been used onsite 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, 2007).

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, none of the five soil samples detected metals above the regulatory limits, and no explosives were detected.

Current Use: Vacant land

Current Status: There is no physical evidence of UXO or munitions debris on the MRS.

Cleanup/Exit Strategy: No further action is required.

2.6.3 FGGM-005-R-01 (OU-42) – Pistol Range A

Regulatory Driver: CERCLA

Previous 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, Pistol Range A is a former small arms range 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: Information regarding frequency of use and types of munitions used were unavailable, but .45-cal ammunition is assumed to have been used because it was the common pistol ammunition in the 1920s. 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 in use 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. There is no information on any UXO responses conducted onsite.

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).

Current Use: All structures have been demolished and currently Building 850 is within the range area. The undeveloped area is flat with grass vegetation and a few scattered trees and shrubs.

Current Status: NFA

Cleanup/Exit Strategy: No further action is required.

2.6.4 FGGM-006-R-01 (OU-43) – Pistol Range B

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA.....2002-2003

Historical Records Review 2006

SI 2007

Contaminants of Potential Concern: None identified

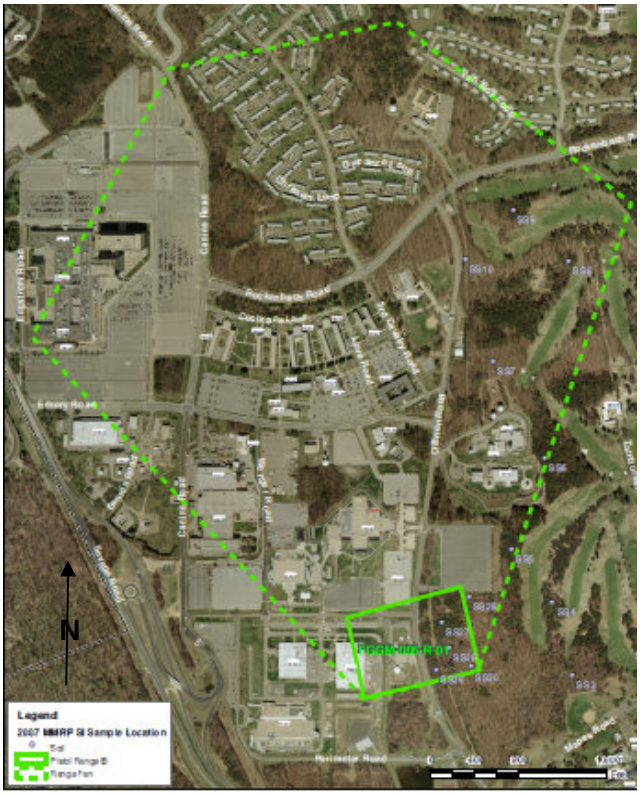
Media of Concern: None identified

Site Location: Grid E4, located 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: Information regarding frequency of use and types of munitions used were unavailable, but .45-cal ammunition is assumed to have been used because it was the common pistol ammunition in the 1920s. 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 in use 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. There is no information on any UXO responses conducted onsite.

East of O'Brien Road, the range is undeveloped with a walking/jogging trail going through the site. West of O'Brien Road, the range is now within 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).



Current Use: This AOI is now within NSA property and is mostly developed with buildings and parking areas.

Current Status: NFA

Cleanup/Exit Strategy: No further action is required.

2.7 Base Realignment and Closure Sites Designated for No Further Action

2.7.1 FGGM 32 (OU-18) – Fire Training Area (part of Tipton)

Regulatory Driver: CERCLA

Previous Environmental Investigations

Enhanced PA.....1989
SI.....1992
Ordnance and Explosives Removal Action.....1997
RI.....1998
Removal Action Report.....1998
Significant Difference Report.....2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid E5, The 2-acre former FTA was located 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 for training purposes by the Fort Meade Fire Department. 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 oil-water separator located on the south side of the fire training pit was used in 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 oil-water separator were removed in 1998.

Previous Studies: The TAP-OU RoD presents the final remedy for soils as NFA.

Current Use: Vacant land.

Current Status: A 5-year review occurs every five years to evaluate the frequency and need for continued LTGM, the last one was conducted in 2009.

Cleanup/Exit Strategy: It is recommended that FGGM 32 be administratively closed since groundwater is being monitored currently under FGGM 10 for all of Tipton. The final remedy for groundwater, as described in the upcoming ESD, will be land use controls with groundwater monitoring.

2.7.2 FGGM 80 (OU-32) – Helicopter Hangar 90 (part of Tipton)

Regulatory Driver: CERCLA

Previous Environmental Investigations

PA.....1989
SI 1992
RI 1998
Removal Action Report 1999
Significant Difference Report.....2010

Contaminants of Potential Concern: Metals, fuels, and oils.

Media of Concern: Soil and groundwater

Site Location: Grid E5, The Helicopter Hangar Area (HHA) is located at the northwest corner of the Tipton Army Airfield (TAA), and includes Building 90 (the Helicopter Hangar) and adjacent areas located at the northwest corner of the airfield.

Site Description: The HHA - Building 90 and associated structures were constructed in the early 1980s. Hangar 90 was used for the maintenance and storage of 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: Some of studies and reports at Fort Meade that included the BRAC parcels were: an Enhanced PA (1989); a study by the Maryland Department of Natural Resources (MDNR); 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).

Current Use: Unoccupied.

Current Status: A 5-year review occurs every five years to evaluate the frequency and need for continued LTGM, the last one was conducted in 2009. This ensures the remedy continues to provide adequate protection of human health and the environment.

Cleanup/Exit Strategy: Both RODs selected NFA for soils and groundwater monitoring for the FTA. It is recommended that FGGM 80 be administratively closed since the ROD presents the final remedy for soils as NFA and groundwater is being monitored currently under FGGM 10 for all of Tipton. The final remedy for groundwater, as will be described in the upcoming ESD, will be land use controls with groundwater monitoring.

3.0 Site Management Schedules

This section describes the proposed future work actions and schedules for the FGGM sites that require further action. Schedules depicting the major project activities for each site 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 Assumptions for Site Management Plan Schedules

The following assumptions were developed as generic guidelines for duration of tasks. The durations are generic because the level of effort for a site is unknown until further investigation is performed. Where site specific schedules were available, the generic durations were modified.

As discussed in Section 2, some FGGM sites are ongoing and some sites are newly identified where little, if any, work has been conducted. The generic SMP schedule durations were adjusted to identify the current phase of work being performed at the time this document was written.

3.2 Site Management Plan Schedules

Table 3-1 below is a summary of submittals due until the third amendment of the SMP (through June 15, 2012). All schedules will be updated yearly, as the SMP is updated. Table 3-2 on the following pages includes detailed project schedules for out years for Open sites at Fort Meade. Additionally, Table 3-3 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 3-2 of this Final document have changed from the milestones presented in the Final 2010 Amended SMP.

Whenever “EPA reviews” appear in the project schedules it is understood to mean the U.S. Environmental Protection Agency (EPA) and appropriate signatories of the Fort Meade Federal Facilities Agreement (FFA). What constitutes “appropriate” is determined by ownership and/or proximity to the site, i.e., the USAOC will review all documents pertaining to the USAOC Campus at Fort Meade (concurrent with the EPA) and if there is known or suspected impacts to the USAOC Campus by an adjacent cleanup site i.e., Operable Unit 4 or the Operable Unit 5 (DRMO site). Review of these sites will also be done concurrent with EPA review. Neither site is owned by USAOC, but both sites have contaminated groundwater that has been observed on the USAOC Campus. The Closed Sanitary Landfill (CSL), Operable Unit 12 is located very close to the Campus; however, the site is hydraulically down and cross gradient from the AOC 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 3-1: Summary of Submittals due Through June 15, 2012

Document	Submittal Date
Submit Draft 2011 SMP	7/11/2011
Submit Draft Final 2011 SMP	9/8/2011
Submit Final 2011 SMP	11/7/2011
FGGM 07 (OU-5) DRMO Drum Site	
RI Comment Resolution	7/31/2011
RI Addendum	12/31/2011
Revised FS or FS Addendum	2/29/2012
Final FS	4/30/2012
FGGM 13 (OU-10) Former Pesticide Shop Bldg. 6621	
Final RI Report	6/14/2011
Draft Final FS	7/8/2011
Final FS	10/21/2011
Draft Final Proposed Plan	11/2/2011
Final Proposed Plan	2/13/2012
Draft Final Decision Document	3/1/2012
Final Decision Document	6/7/2012
FGGM 17 (OU-12) CSL	
Draft-Final FS	10/17/2011
Final FS	2/2/2012
Draft Final Proposed Plan	2/14/2012
Final Proposed Plan	5/21/2012
Draft Final Decision Document	6/8/2012
FGGM 47, 49, 86, 88, 89, 90, 91, 92 (OU-4) & 125d and 126d	
Draft Final Source Identification Report 125d and 126d	12/1/2011
Final Source Identification Report 125d and 126d	3/16/2012
Draft-Final RIFS Report OU-4	12/1/2011
Final RIFS Report OU-4	3/16/2012
Draft-Final Proposed Plan	3/21/2012
FGGM 74 (OU-29) Architect of the Capitol	
Draft-Final RI Report	6/28/2011
Final RI Report	11/2/2011
Draft Final Feasibility Study	11/21/2011
Final Feasibility Study	2/9/2012
Draft Final Proposed Plan	3/13/2012

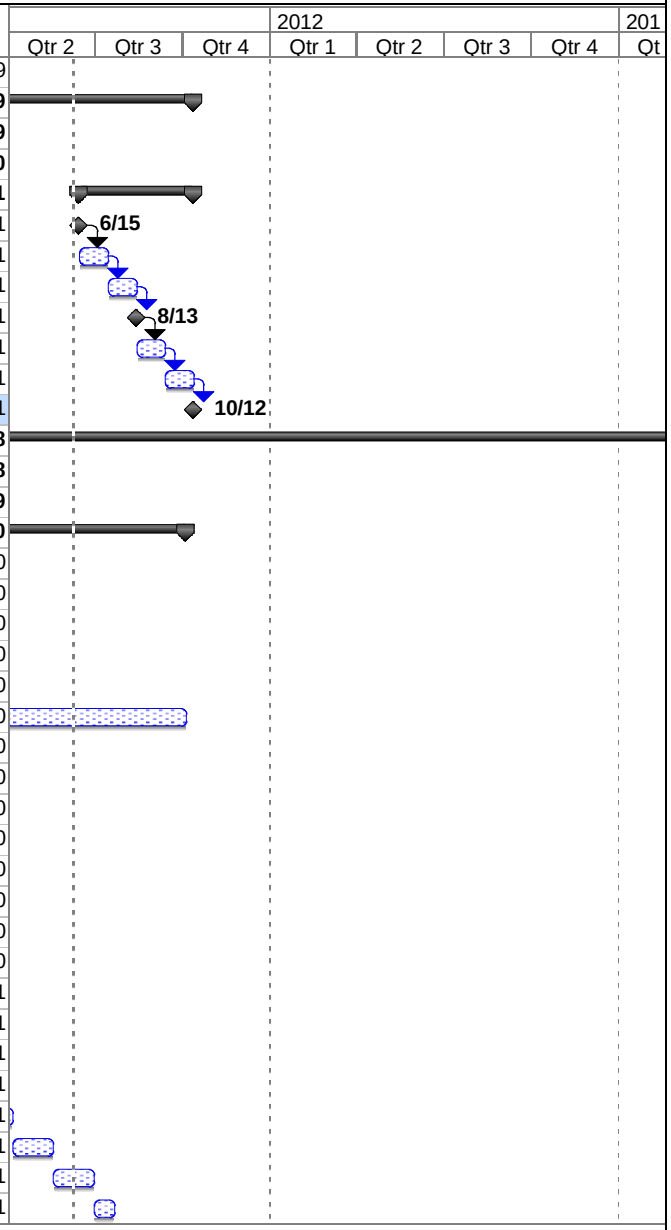
Document	Submittal Date
Final Proposed Plan	5/24/2012
FGGM 83 (OU-1) Former Trap And Skeet Range	
Final RI Report	6/09/2011
Draft FS	9/18/2011
Draft Final FS	1/16/2012
Final FS	5/15/2012
FGGM 87 (OU-3) Former Nike Control Site	
Draft Final RI Report	5/06/2011
Final RI Report	9/03/2011
Draft Final FS	3/31/2012
FGGM 93 (OU-36) Manor View Dump	
Final FS	6/2/2011
Draft Final EECA for Non Time Critical Removal Action	6/14/2011
Draft-Final Proposed Plan	10/3/2011
Final EECA for Non Time Critical Removal Action	8/12/2011
Draft Final NTRCA Work Plan	9/8/2011
Final Proposed Plan	1/3/2012
Draft Final Decision Document	1/31/2012
Final NTRCA Work Plan	11/17/2011
Final Decision Document	5/14/2012
PA/SI AOIs (includes FGGMs 08, 09, 11, 14, 18, 19, 21, 32, 33, 37, 45, 51, 70, 71, 72, 73, 75, 80, 82, 95 and 96)	
Draft PA/SI *Golf Course AOIs* Report	10/3/2011
Draft Final PA/SI *Golf Course AOIs* Report	1/31/2012
Final PA/SI *Golf Course AOIs* Report	5/5/2012
Final PA/SI *North, Southeast, Southwest AOIs* Work Plans	8/26/2011
Draft PA/SI *North, Southeast, Southwest AOIs* Reports	5/30/2012
Draft Final PA/SI *BRAC and Other AOIs* Consensus Letter/Work Plan	6/15/2012
Final PA/SI *BRAC and Other AOIs* Consensus Letter/Work Plan	10/15/2011
Draft PA/SI *BRAC and Other AOIs* Report	6/14/2012
FGGM-003-R-01 (OU-40) Mortar Range (MMRP)	
Final RI Report	6/22/2011
Draft-Final Feasibility Study	6/6/2011
Final Feasibility Study	8/22/2011
Draft Final Proposed Plan	6/13/2011
Final Proposed Plan	8/9/2011

Document	Submittal Date
Draft Final Decision Document	8/16/2011
Final Decision Document	9/28/2011
Draft Final Remedial Design	10/26/2011
Final Remedial Design	12/20/2011
Draft Final Remedial Action Report	3/14/2012
Final Remedial Action Report	4/27/2012
FGGM 10 (OU-8) Tipton Groundwater OU (BRAC)	
2009 TAP 5-Yr Review Final Report	7/18/2011
2011 Draft Combined BRAC GW OUs LTM Plan	08/05/2011
2011 Draft Final Combined BRAC GW OUs LTM Plan	10/07/2011
2011 Combined BRAC GW OUs LTM Final Plan	12/27/2011
2011 Combined BRAC GW OUs LTM Draft Report	2/14/2012
2011 Combined BRAC GW OUs LTM Draft Final Report	6/13/2012
FGGM 20 (OU-15) Ordnance Demo Area (BRAC)	
2010 ODA Groundwater OU LTM Draft Final Report	6/13/2011
2010 ODA Groundwater OU LTM Final Report	7/1/2011
2011 ODA Draft ROD	7/6/2011
2011 Draft Combined BRAC GW OUs LTM Plan	08/05/2011
2011 Draft Final Combined BRAC GW OUs LTM Plan	10/07/2011
2011 ODA Draft Final ROD	11/2/2011
2011 Combined BRAC GW OUs LTM Final Plan	12/27/2011
2011 ODA Final ROD	1/30/2012
2011 Combined BRAC GW OUs LTM Draft Report	2/14/2012
2011 Combined BRAC GW OUs LTM Draft Final Report	6/13/2012
FGGM 31 (OU-17) Inactive Landfill 3 (part of Tipton, BRAC)	
2009 TAP 5-Yr Review Final Report	7/18/2011
2011 Draft Combined BRAC GW OUs LTM Plan	08/05/2011
2011 Draft Final Combined BRAC GW OUs LTM Plan	10/07/2011
2011 Combined BRAC GW OUs LTM Final Plan	12/27/2011
2011 Combined BRAC GW OUs LTM Draft Report	2/14/2012
2011 Combined BRAC GW OUs LTM Draft Final Report	6/13/2012
FGGM 81 (OU-33) Clean Fill Dump	
2010 Clean Fill Dump Groundwater OU LTM Draft Final Report	6/13/2011
2009 Clean Fill Dump 5-Yr Review Final Report	6/26/2011
2011 Draft Combined BRAC GW OUs LTM Plan	08/05/2011
2011 Draft Combined BRAC GW OUs LTM Plan	08/05/2011

Document	Submittal Date
2010 Clean Fill Dump Groundwater OU LTM Final Report	9/11/2011
2011 Draft Final Combined BRAC GW OUs LTM Plan	10/07/2011
2011 Combined BRAC GW OUs LTM Final Plan	12/27/2011
2011 Combined BRAC GW OUs LTM Draft Report	2/14/2012
2011 Combined BRAC GW OUs LTM Draft Final Report	6/13/2012
FGGM 85 (OU-35) UXO Tipton Airfield Parcel	
2011 TAP ESD Draft Final Report	TBD
2011 TAP ESD Final Report	TBD
2011 LPR Sweep LTM Draft Report	12/6/2011
2011 Tipton Inactive Landfills Maintenance Draft Report	12/8/2011
2011 Tipton Inactive Landfills Maintenance Draft Final Report	3/28/2012
2011 LPR Sweep LTM Draft Final Report	4/4/2012
2011 Tipton Inactive Landfills Maintenance Final Report	6/15/2012
FGGM 94 (OU-37) Trap And Skeet Range 17 (BRAC)	
Trap and Skeet Range 17 RI/FS Draft Final Report	7/15/2011
Trap and Skeet Range 17 RI/FS Final Report	10/13/2011
Trap and Skeet Range 17 Draft Proposed Plan	11/12/2011
Trap and Skeet Range 17 Draft Final Proposed Plan	3/22/2012
Trap and Skeet Range 17 Draft ROD	3/22/2012
Trap and Skeet Range 17 Final Proposed Plan	6/11/2012
Trap and Skeet Range 17 Draft Final ROD	6/12/2012
6-Acre Little Patuxent River Site	
Draft Environmental Condition of Property (ECP)	12/31/2012
Draft Final ECP	4/29/2013
FGGM 002-R-01 (OU-39) High Explosive Impact and Disposal Area (BRAC MMRP)	
2009 NTCRA Draft Final 5-Yr Review Report	6/3/2011
2009 NTCRA Final 5-Yr Review Report	8/22/2011
2011 High Explosive Impact and Disposal (HEI) Area Draft Proposed Plan	7/27/2011
2011 HEI Area Draft Final Proposed Plan	11/18/2011
2011 HEI Area Final Proposed Plan	2/16/2012
2012 HEI Area Draft ROD	3/30/2012

Table 3-2 Project Schedules for Open Sites at Fort Meade

ID	Task Name	Duration	Start
1	Federal Facilities Agreement Effective Date	0 days	10/6/2009
2	**Site Management Plan**	**951 days**	**3/6/2009**
3	**2009 Site Management Plan**	**243 days**	**3/6/2009**
10	**2010 Site Management Plan**	**129 days**	**6/15/2010**
20	**2011 Site Management Plan**	**120 days**	**6/15/2011**
21	Submit Draft 2011 SMP	0 days	6/15/2011
22	Regulatory Review	30 days	6/15/2011
23	Address Comments	30 days	7/15/2011
24	Submit Draft Final 2011 SMP	0 days	8/13/2011
25	Regulatory Review	30 days	8/14/2011
26	Address Comments	30 days	9/13/2011
27	Submit Final 2011 SMP	0 days	10/12/2011
28	**FGGM 07 (OU-5) DRMO Drum Site**	**2071 days**	**5/1/2008**
29	**FFS Addendum Work Plan: Pre-Design Plume Delineation and Data Collection**	**462 days**	**5/1/2008**
30	**Pre-Design Plume Delineation and Data Collection**	**156 days**	**8/24/2009**
31	**Focused Feasibility Study Addendum Technical Report**	**616 days**	**1/27/2010**
32	Internal Draft	38 days	1/27/2010
33	Army Review	11 days	3/8/2010
34	Draft	0 days	3/18/2010
35	MDE Review	32 days	3/19/2010
36	EPA Review	130 days	3/19/2010
37	RI and FFS Comment Resolution	435 days	7/27/2010
38	Review and Meeting with Army to Discuss Comments	30 days	7/27/2010
39	RTC Extension Request to EPA	0 days	9/3/2010
40	RI and FFS Comment Resolution	15 days	9/7/2010
41	Army Review of RTCs	21 days	9/22/2010
42	RTCs due to EPA	0 days	10/14/2010
43	EPA Review	62 days	10/15/2010
44	MDE Review	32 days	10/15/2010
45	Comment Resolution	15 days	12/16/2010
46	Draft RI Work Plan	26 days	1/3/2011
47	Army Review	19 days	1/31/2011
48	EPA Review	30 days	2/21/2011
49	MDE Review	30 days	2/21/2011
50	Comment Resolution	14 days	3/23/2011
51	RI Field Work Prep, Mob, Lab	42 days	4/6/2011
52	Prepare Draft Final RTCs and RI Addendum	43 days	5/18/2011
53	Army Review	22 days	6/30/2011

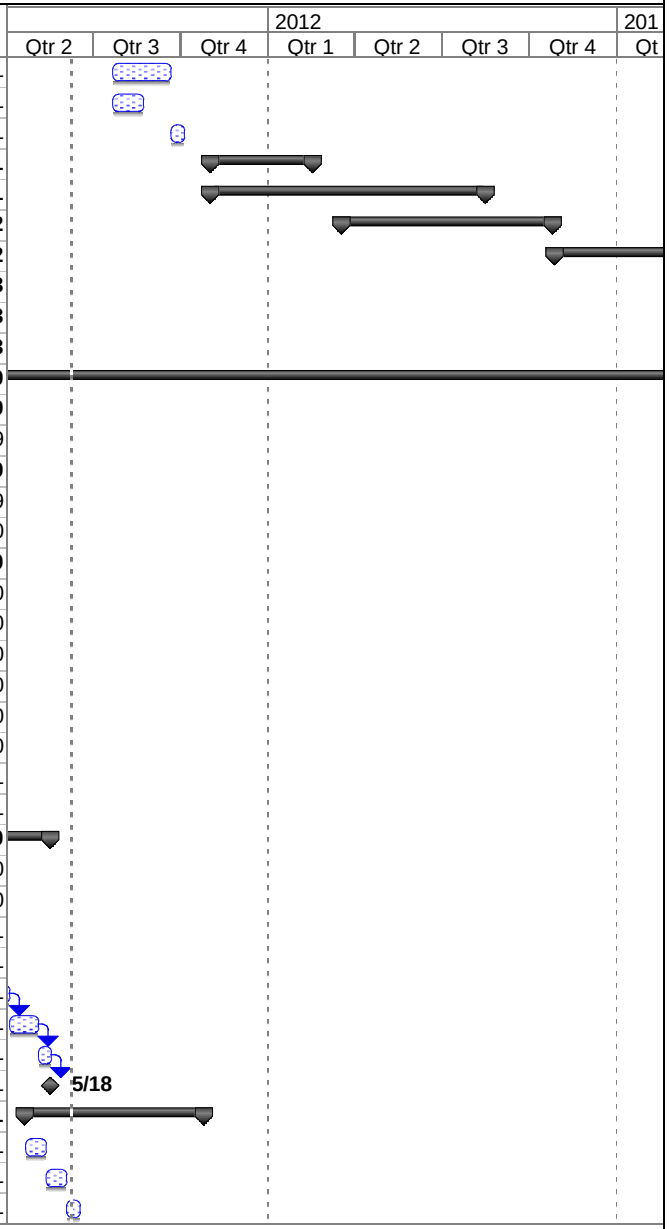


Project: SMP Schedule
Date: 6/8/2011

Task
Summary
Submittal to Regulatory Agency

Table 3-2 Project Schedules for Open Sites at Fort Meade

ID	Task Name	Duration	Start
54	EPA Review	61 days	7/22/2011
55	MDE Review	32 days	7/22/2011
56	Final Comment Resolution	14 days	9/21/2011
57	**Draft Final - FFS Addendum**	**108 days**	**11/2/2011**
61	**Proposed Plan**	**289 days**	**11/2/2011**
72	**Decision Document**	**222 days**	**3/19/2012**
83	**Remedial Design**	**158 days**	**10/29/2012**
94	**Remedial Action**	**63 days**	**4/19/2013**
98	**Remedial Action Report**	**148 days**	**6/21/2013**
106	**LTO/LTM - 2013**	**203 days**	**6/12/2013**
124	**FGGM 13 (OU-10) Former Pesticide Shop Bldg. 6621**	**2331 days**	**8/21/2009**
125	**Remedial Investigation Work Plan**	**34 days**	**8/21/2009**
126	Prepare Groundwater Sampling Work Plan	34 days	8/21/2009
127	**RI Field Investigation**	**219 days**	**9/24/2009**
128	GW Sampling	48 days	9/24/2009
129	Well Install/Develop/Sample	40 days	3/22/2010
130	**Remedial Investigation Report**	**261 days**	**5/3/2010**
131	Draft RI	82 days	5/3/2010
132	Army Review	44 days	7/26/2010
133	Draft Final RI	10 days	9/8/2010
134	MDE Review	30 days	9/20/2010
135	EPA Review	58 days	9/20/2010
136	Comment Resolution	49 days	11/17/2010
137	Final	14 days	1/5/2011
138	Approved RI	0 days	1/18/2011
139	**Feasibility Study**	**392 days**	**4/21/2010**
140	Draft FS	244 days	4/21/2010
141	Army Review	23 days	12/21/2010
142	Draft Final FS	21 days	1/13/2011
143	MDE Review	32 days	2/3/2011
144	EPA Review	60 days	2/3/2011
145	Comment Resolution	30 days	4/4/2011
146	Final	14 days	5/4/2011
147	Approved FS	0 days	5/18/2011
148	**Proposed Plan**	**188 days**	**4/21/2011**
149	Draft	21 days	4/21/2011
150	Army Review	22 days	5/12/2011
151	Draft Final	14 days	6/3/2011

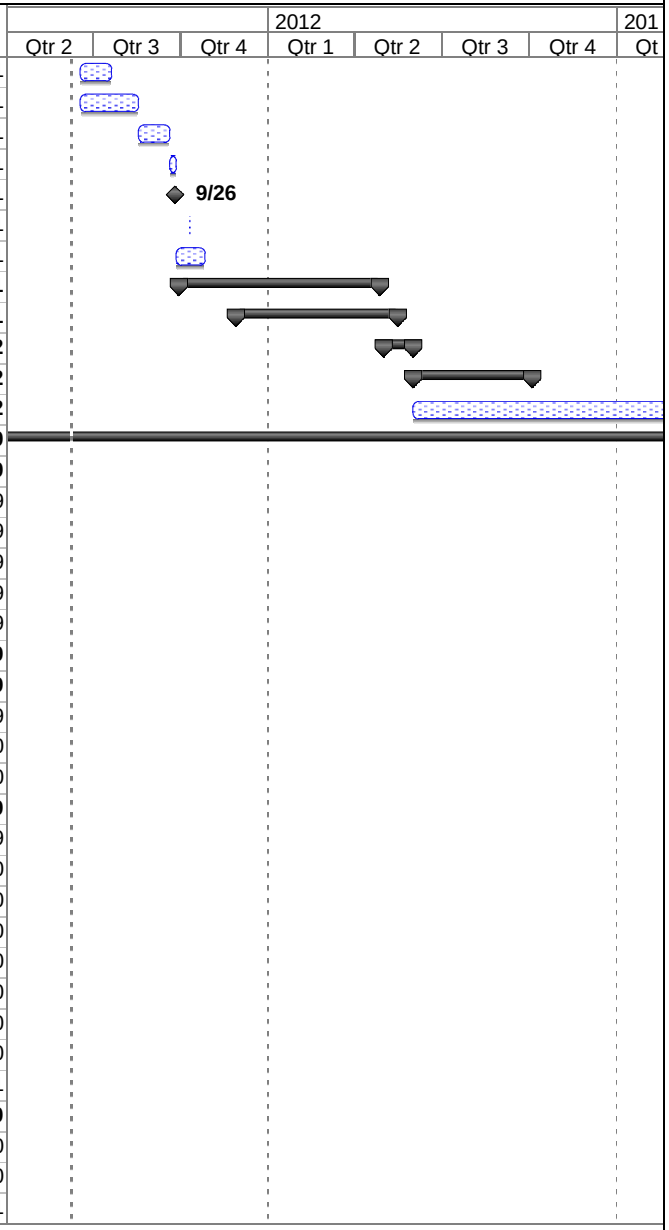


Project: SMP Schedule
Date: 6/8/2011

Task
Summary
Submittal to Regulatory Agency

Table 3-2 Project Schedules for Open Sites at Fort Meade

ID	Task Name	Duration	Start
152	MDE Review	33 days	6/17/2011
153	EPA Review	61 days	6/17/2011
154	Comment Resolution	33 days	8/17/2011
155	Prepare Final	7 days	9/19/2011
156	Approved Proposed Plan	0 days	9/26/2011
157	Public Meeting	1 day	10/10/2011
158	Public Comment Period	30 days	9/26/2011
159	**Decision Document**	**211 days**	**9/30/2011**
170	**Remedial Design**	**170 days**	**11/29/2011**
179	**Remedial Action**	**31 days**	**5/2/2012**
183	**Remedial Action Report**	**125 days**	**6/2/2012**
191	**LTO/LTM**	**1316 days**	**6/1/2012**
192	**FGGM 17 (OU-12) Closed Sanitary Landfill**	**2324 days**	**8/21/2009**
193	**Remedial Investigation**	**127 days**	**8/21/2009**
194	EPA Review and Comment on Final RI	34 days	8/21/2009
195	Prepare RTCs/Submit to Army	48 days	9/24/2009
196	Army Review	7 days	11/11/2009
197	Army Submittal to EPA/MDE	8 days	11/18/2009
198	Comment Resolution on RTCs	30 days	11/26/2009
199	**Pre-FS Investigation Work Plans**	**501 days**	**8/21/2009**
200	**ROE Request (Amtrak)**	**357.5 days**	**8/21/2009**
201	Prepare/Submit ROE Request	36 days	8/21/2009
202	Amtrak ROE Meeting	1 day	1/5/2010
203	ROE Negotiation	192 days	2/2/2010
204	**Investigation Work Plan**	**463 days**	**9/28/2009**
205	Evaluate Site Data/CSM	58 days	9/28/2009
206	Draft	11 days	3/1/2010
207	Army Review	189 days	3/12/2010
208	Draft Final	19 days	9/17/2010
209	MDE Review	30 days	10/6/2010
210	EPA Review	62 days	10/6/2010
211	Comment Resolution	10 days	12/7/2010
212	Final	18 days	12/17/2010
213	Approved Work Plan	0 days	1/3/2011
214	**Pre-FS Investigation**	**37 days**	**12/7/2010**
215	Geoprobe Investigation	3 days	12/7/2010
216	Data Analysis	25 days	12/10/2010
217	Well Installation	7 days	1/4/2011

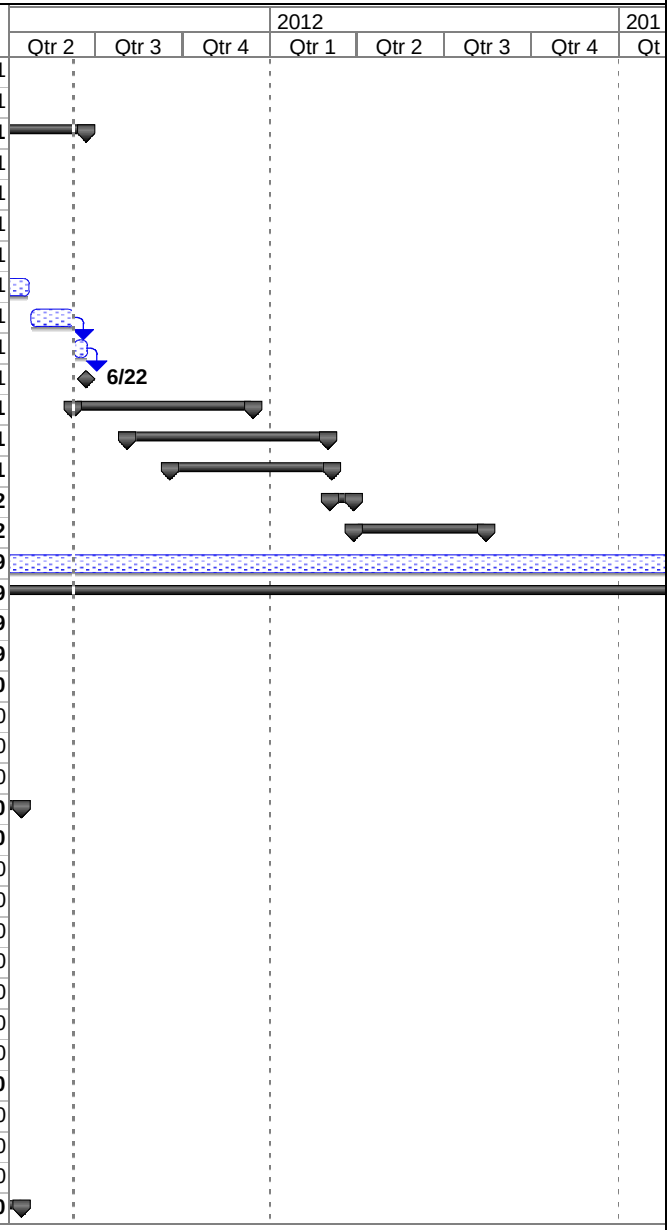


Project: SMP Schedule
Date: 6/8/2011

Task
Summary
Submittal to Regulatory Agency

Table 3-2 Project Schedules for Open Sites at Fort Meade

ID	Task Name	Duration	Start
218	Groundwater Sampling 1	1 day	1/11/2011
219	Groundwater Sampling 2	1 day	1/12/2011
220	**Feasibility Study**	**162 days**	**1/12/2011**
221	Draft	8 days	1/12/2011
222	Army Review	21 days	1/20/2011
223	Draft Final	14 days	2/10/2011
224	MDE Review	30 days	2/24/2011
225	EPA Review	58 days	2/24/2011
226	Comment Resolution	45 days	4/25/2011
227	Final	14 days	6/9/2011
228	Approved FS	0 days	6/22/2011
229	**Proposed Plan**	**189 days**	**6/9/2011**
240	**Decision Document**	**211 days**	**8/5/2011**
251	**Remedial Design**	**170 days**	**9/19/2011**
260	**Remedial Action**	**25 days**	**3/5/2012**
264	**Remedial Action Report**	**139 days**	**3/30/2012**
272	**LTO/LTM**	**2324 days**	**8/21/2009**
273	**FGGM 47, 49, 86, 88, 89, 90, 91, 92 (OU-4) & 125d and 126d**	**2323 days**	**8/21/2009**
274	**OU-4 Remedial Investigation**	**391 days**	**8/21/2009**
275	**Remedial Investigation Work Plan Addendum OU4**	**265.25 days**	**8/21/2009**
290	**Remedial Investigation OU4**	**178 days**	**3/22/2010**
291	Mobilize	1 day	3/22/2010
292	Field Work for OU-4 (Phase 1 - CPT and MIPs)	18 days	3/23/2010
293	Phase 1B OU-4 Fieldwork (Rotosonic)	107 days	6/1/2010
294	**Source Identification 125d and 126d**	**278 days**	**7/12/2010**
295	**Source Identification Workplan**	**169 days**	**7/12/2010**
296	Draft Workplan (based on OU4 field data)	73 days	7/12/2010
297	Army Review	21 days	9/23/2010
298	Draft Final Workplan	7 days	10/14/2010
299	MDE Review	30 days	10/21/2010
300	EPA Review	62 days	10/21/2010
301	Final	2 days	12/22/2010
302	Approved Workplan	1 day	12/27/2010
303	**Source ID Fieldwork LPA**	**48 days**	**10/7/2010**
304	Mobilize	2 days	10/7/2010
305	Fieldwork for 125d and 126d source identification	40 days	10/11/2010
306	Demobilization	2 days	11/22/2010
307	**Source Identification Report 125d and 126d**	**145 days**	**11/22/2010**

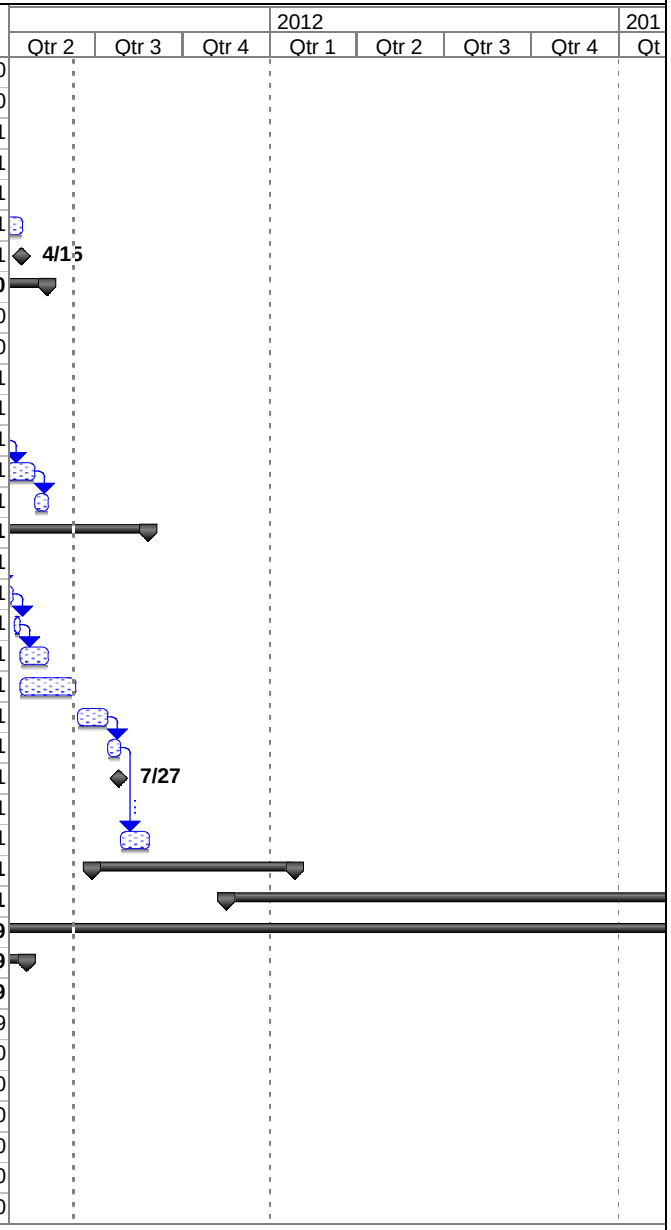


Project: SMP Schedule
Date: 6/8/2011

Task
Summary
Submittal to Regulatory Agency

Table 3-2 Project Schedules for Open Sites at Fort Meade

ID	Task Name	Duration	Start
308	Prepare Draft	32 days	11/22/2010
309	Army Review	22 days	12/27/2010
310	Prepare Draft Final	21 days	1/18/2011
311	MDE Review	30 days	2/8/2011
312	EPA Review	58 days	1/18/2011
313	Comment Resolution	30 days	3/17/2011
314	Approved Source Identification Report	0 days	4/15/2011
315	**Remedial Investigation/Feasibility Study**	**170 days**	**11/24/2010**
316	Finalize addressing previous EPA/MDE Comments	30 days	11/24/2010
317	Army Review	22 days	12/27/2010
318	Draft Final	18 days	1/18/2011
319	MDE Review	25 days	2/5/2011
320	EPA Review	53 days	2/5/2011
321	Comment Resolution (Final)	30 days	3/30/2011
322	Approved RI/FS	14 days	4/29/2011
323	**Proposed Plan**	**178 days**	**3/2/2011**
324	Draft	14 days	3/2/2011
325	Army Review	21 days	3/16/2011
326	Draft Final	6 days	4/7/2011
327	MDE Review	30 days	4/13/2011
328	EPA Review	59 days	4/13/2011
329	Comment Resolution	31 days	6/13/2011
330	Prepare Final	14 days	7/14/2011
331	Approved Proposed Plan	0 days	7/27/2011
332	Public Meeting	1 day	8/11/2011
333	Public Comment Period	30 days	7/28/2011
334	**Decision Document**	**213 days**	**6/29/2011**
345	**RIP OU-4/LPA (Option)**	**1505 days**	**11/17/2011**
368	**FGGM 74 (OU-29) Architect of the Capitol**	**2318 days**	**8/26/2009**
369	**Remedial Investigation**	**603 days**	**8/26/2009**
370	**Workplan**	**384 days**	**8/26/2009**
371	RI WP Draft--Determine arsenic issues	188.54 days	8/26/2009
372	RI WP for lead hotspots	87 days	3/2/2010
373	ROE (Negotiate Access)	128 days	3/2/2010
374	Army Review	35.46 days	5/28/2010
375	RI WP Final	14 days	7/6/2010
376	MDE review	30 days	7/22/2010
377	EPA review	32 days	7/20/2010

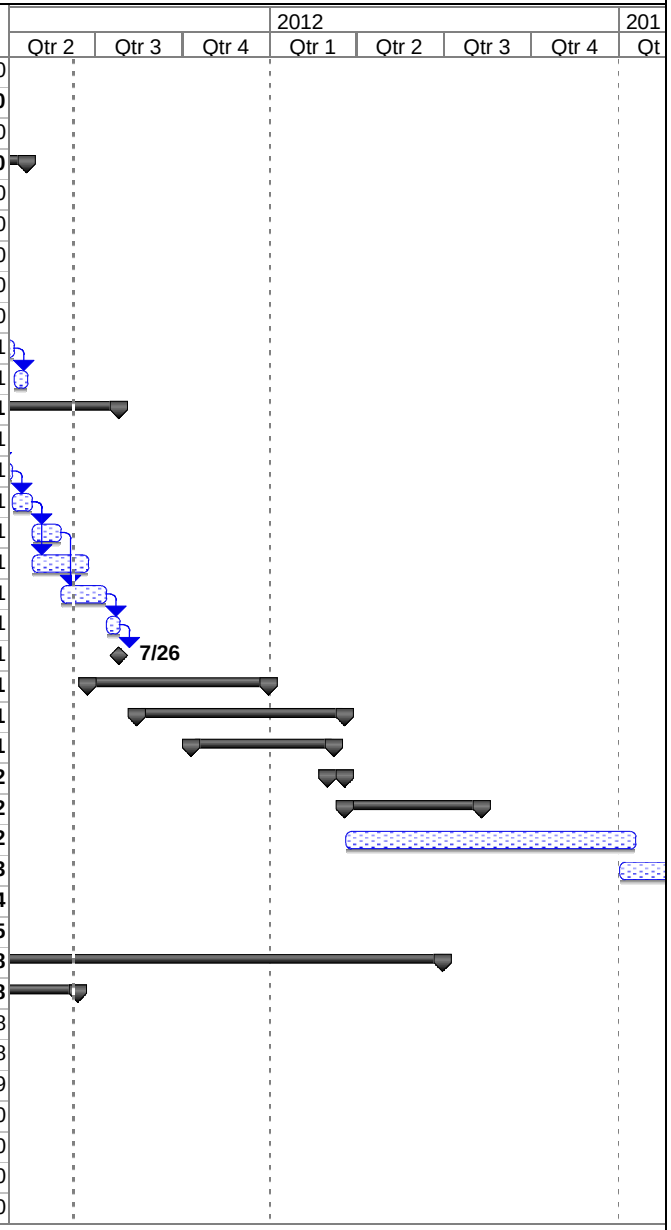


Project: SMP Schedule
Date: 6/8/2011

Task
Summary
Submittal to Regulatory Agency

Table 3-2 Project Schedules for Open Sites at Fort Meade

ID	Task Name	Duration	Start
378	Comment Resolution	15 days	8/30/2010
379	**RI Fieldwork**	**7 days**	**9/14/2010**
380	RI Field Work	7 days	9/14/2010
381	**RI Report**	**198 days**	**10/5/2010**
382	RI Risk Review	28 days	10/5/2010
383	Draft-Final RI	36 days	10/5/2010
384	Army Review	21 days	11/10/2010
385	MDE Review	34 days	12/1/2010
386	EPA Review	62 days	12/1/2010
387	Comment Resolution	65 days	2/1/2011
388	Approved RI	14 days	4/7/2011
389	**Feasibility Study**	**176 days**	**2/1/2011**
390	Draft	42 days	2/1/2011
391	Army Review	21 days	3/15/2011
392	Draft Final	21 days	4/5/2011
393	MDE Review	30 days	4/26/2011
394	EPA Review	59 days	4/26/2011
395	Comment Resolution	48 days	5/26/2011
396	Final	14 days	7/13/2011
397	Approved FS	0 days	7/26/2011
398	**Proposed Plan**	**190 days**	**6/24/2011**
409	**Decision Document**	**218 days**	**8/15/2011**
420	**Remedial Design**	**150 days**	**10/11/2011**
429	**Remedial Action**	**18 days**	**3/2/2012**
433	**Remedial Action Report**	**144 days**	**3/20/2012**
441	**LTO/LTM**	**305 days**	**3/20/2012**
442	**Year 2 (2013)**	**364 days**	**1/2/2013**
443	**Year 3 (2014)**	**364 days**	**1/2/2014**
444	**Year 4 (2015)**	**363 days**	**1/2/2015**
445	**FGGM 83 (OU-1) Former Trap And Skeet Range**	**1491 days**	**6/1/2008**
446	**RI Report**	**1108 days**	**6/1/2008**
447	Site Specific Terrestrial Ecological Risk Assessment Field Study Workplan	104 days	6/1/2008
448	Regulatory Review/Comment	209 days	9/13/2008
449	Work Plan Addendum/Regulatory Review/Responses	41 days	4/10/2009
450	Regulatory No Further Comment Letters for Work Plan Addendum	40 days	5/20/2010
451	Sediment Sampling	2 days	7/26/2010
452	Analytical, Data Review and Validation	45 days	7/28/2010
453	Draft Final RI Report (including Ecological Risk Assessment)	57 days	9/10/2010

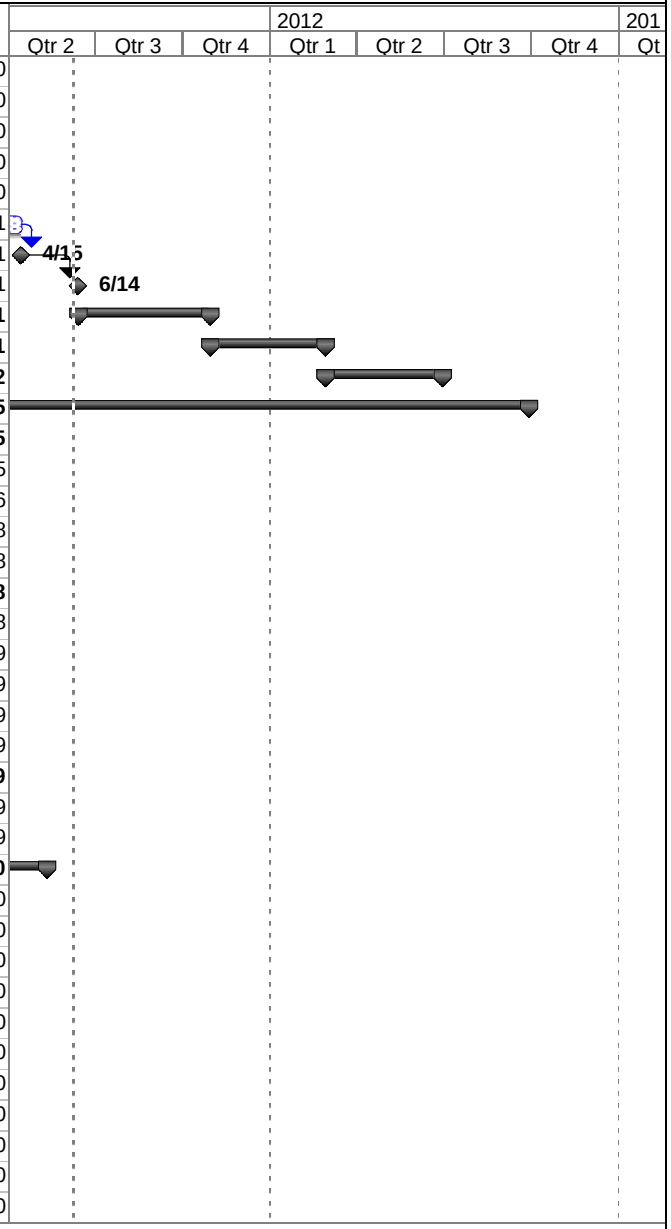


Project: SMP Schedule
Date: 6/8/2011

Task
Summary
Submittal to Regulatory Agency

Table 3-2 Project Schedules for Open Sites at Fort Meade

ID	Task Name	Duration	Start
454	Army review of Draft RI	30 days	11/6/2010
455	Responses to Army Draft RI comments/Telecon to resolve	10 days	12/7/2010
456	Army approval of Draft RI	0 days	12/20/2010
457	Submittal of Draft Final RI to USEPA and MDE	0 days	12/22/2010
458	Regulatory Review/Address Comments	60 days	12/23/2010
459	Responses to/Resolution of Regulator RI comments	52 days	2/22/2011
460	Final RI Report	0 days	4/15/2011
461	Regulatory Approval	0 days	6/14/2011
462	**Feasibility Study**	**138 days**	**6/15/2011**
468	**Proposed Plan/ROD**	**121 days**	**10/31/2011**
478	**RD/RA**	**123 days**	**2/29/2012**
496	**FGGM 87 (OU-3) Former Nike Control Site**	**2586 days**	**9/1/2005**
497	**RI/FS**	**1315 days**	**9/1/2005**
498	Revision 01 (Draft Final) OU-3 Remedial Investigation Work Plan	149 days	9/1/2005
499	RI/FS field work, analytical, report drafting	727 days	1/28/2006
500	Draft Final RI/FS Submitted for regulatory review	0 days	1/24/2008
501	Regulatory Review	440 days	1/24/2008
502	**RI Work Plan Addendum 3 (soil and groundwater)**	**584 days**	**6/1/2008**
503	Draft Addendum 3 WP	166 days	6/1/2008
504	Regulatory Review Draft Final Addendum 3 WP/Address Comments	235 days	3/6/2009
505	Regulatory Approval Addendum 3	0 days	10/26/2009
506	RI Addendum 3 Field Work	7 days	12/1/2009
507	Analytical/Data Review and Validation	30 days	12/7/2009
508	**Screening Level Ecological Risk Assessment (SLERA)**	**294 days**	**8/1/2009**
509	Draft SLERA	97 days	8/1/2009
510	Regulatory Review/Response to Comments	198 days	11/5/2009
511	**RI Work Plan Addendum 4 (sediment)**	**407 days**	**4/1/2010**
512	Draft RI Work Plan Addendum 4	51 days	4/1/2010
513	Regulatory Review/Response to Comments	33 days	5/22/2010
514	Submittal of Final RI Work Plan Addendum 4	0 days	6/29/2010
515	RI Addendum 4 Field Work	2 days	7/26/2010
516	Analytical, Data Review and Validation	45 days	7/28/2010
517	Revised SLERA submitted to Army	35 days	9/11/2010
518	Army review of Revised SLERA	24 days	10/16/2010
519	Responses to Army comments/Telecon to resolve	21 days	11/9/2010
520	Army approval of Revised SLERA	0 days	11/29/2010
521	Submit Revised SLERA for USEPA and MDE review	0 days	12/3/2010
522	USEPA and MDE review	61 days	12/3/2010

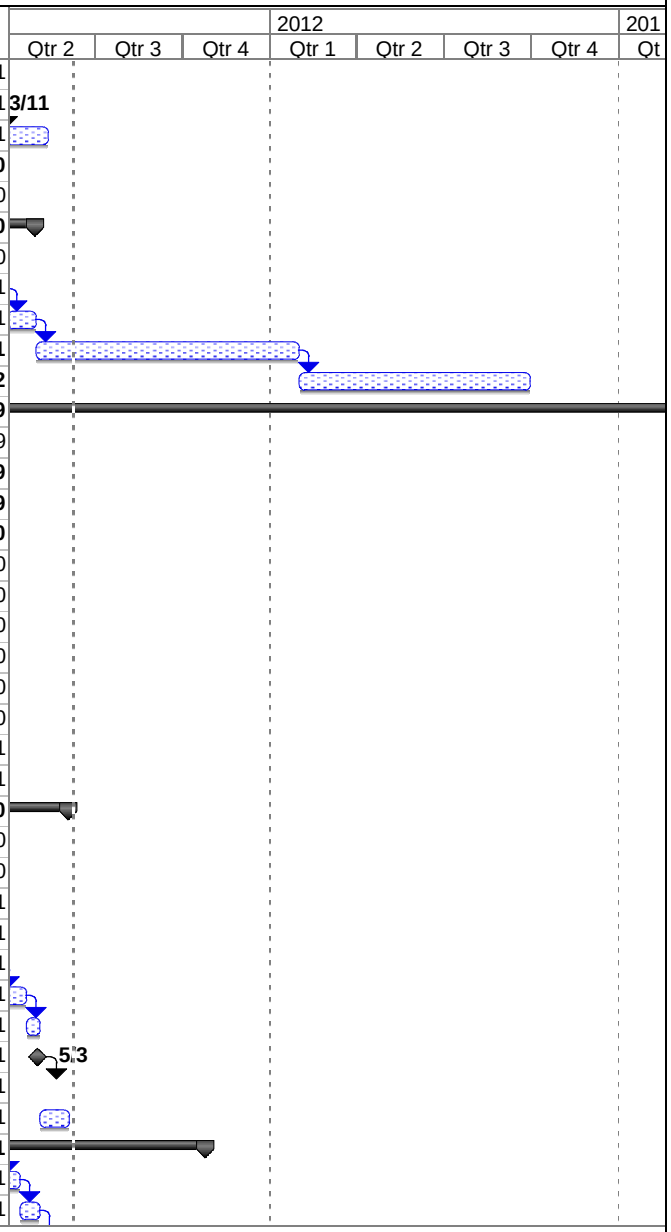


Project: SMP Schedule
Date: 6/8/2011

Task
Summary
Submittal to Regulatory Agency

Table 3-2 Project Schedules for Open Sites at Fort Meade

ID	Task Name	Duration	Start
523	Response to USEPA and MDE comments on Revised SLERA	38 days	2/2/2011
524	Submit Final SLERA	0 days	3/11/2011
525	USEPA and MDE approval of Final SLERA	61 days	3/13/2011
526	**Building 1976 VI determination (Status & timeline to be revised in coordination**	**157 days**	**7/28/2010**
527	Assess Building 1976 for vapor intrusion potential risk	157 days	7/28/2010
528	**Revised RI/FS (Status & timeline to be revised in coordination with EPA require**	**120 days**	**12/31/2010**
529	Draft Revised RI/FS Report	60 days	12/31/2010
530	Regulatory Review/Response to Comments	30 days	3/1/2011
531	Regulatory Approval	30 days	3/31/2011
532	**Proposed Plan/ROD**	**276 days**	**4/30/2011**
533	**RD/RA**	**243 days**	**1/31/2012**
534	**FGGM 93 (OU-36) Manor View Dump**	**2316 days**	**8/21/2009**
535	Initial Planning	6 days	8/21/2009
536	**Pre-FS Activities**	**31 days**	**9/30/2009**
537	**Feasibility Study Investigation**	**230 days**	**8/21/2009**
538	**Feasibility Study**	**366 days**	**2/1/2010**
539	Draft	159 days	2/1/2010
540	Army Review	29 days	7/12/2010
541	Draft Final	52 days	8/10/2010
542	MDE Review	32 days	10/1/2010
543	EPA Review	62 days	10/1/2010
544	Comment Resolution	48 days	12/2/2010
545	Final	14 days	1/19/2011
546	Approved FS	0 days	2/1/2011
547	**Proposed Plan**	**184 days**	**12/2/2010**
548	Draft	21 days	12/2/2010
549	Army Review	23 days	12/23/2010
550	Draft Final	5 days	1/17/2011
551	MDE Review	30 days	1/24/2011
552	EPA Review	58 days	1/24/2011
553	Comment Resolution	28 days	3/23/2011
554	Prepare Final	14 days	4/20/2011
555	Approved Proposed Plan	0 days	5/3/2011
556	Public Meeting	1 day	5/18/2011
557	Public Comment Period	31 days	5/4/2011
558	**Decision Document**	**217 days**	**3/23/2011**
559	Draft	21 days	3/23/2011
560	Army Review	21 days	4/13/2011

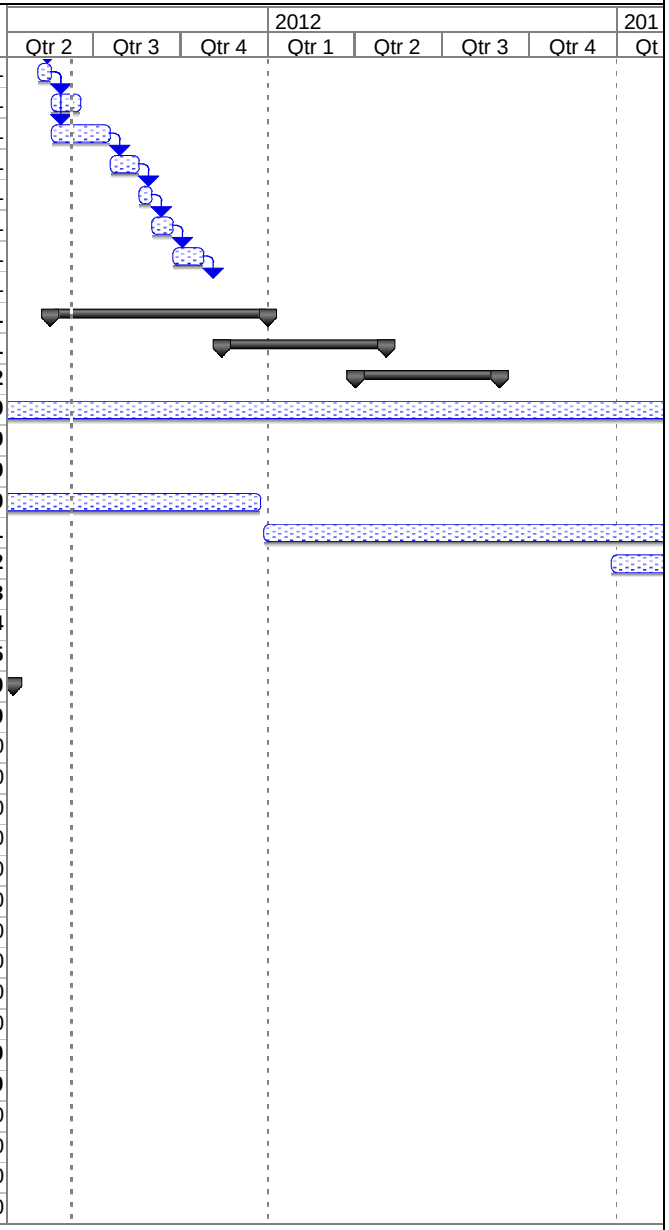


Project: SMP Schedule
Date: 6/8/2011

Task
Summary
Submittal to Regulatory Agency

Table 3-2 Project Schedules for Open Sites at Fort Meade

ID	Task Name	Duration	Start
561	Draft Final	14 days	5/4/2011
562	MDE Review	31 days	5/18/2011
563	EPA Review	62 days	5/18/2011
564	Comment Resolution	30 days	7/19/2011
565	Final	14 days	8/18/2011
566	Army Signature	22 days	9/1/2011
567	EPA Legal and Signature	32 days	9/23/2011
568	Signed DD	1 day	10/25/2011
569	**Remedial Design**	**229 days**	**5/18/2011**
578	**Remedial Action**	**173 days**	**11/14/2011**
588	**Remedial Action Report**	**151 days**	**4/3/2012**
596	**LTO/LTM**	**1756 days**	**8/21/2009**
597	**2009**	**141 days**	**8/21/2009**
598	**2010**	**361 days**	**12/28/2009**
599	**2011**	**362 days**	**12/27/2010**
600	**2012 (Post RIP)**	**466 days**	**12/27/2011**
601	**2013**	**468 days**	**12/26/2012**
602	**2014**	**468 days**	**12/26/2013**
603	**2015**	**363 days**	**12/26/2014**
604	**Methane Decommissioning**	**93 days**	**8/3/2015**
605	**PA/SI Areas of Interest (see Table 3-3 for a list of all AOIs in this project)**	**331 days**	**5/13/2010**
606	**Golf Course Areas of Interest (AOIs)**	**241 days**	**5/13/2010**
607	Draft Final PA/SI Consensus Letter (CL) and Work Plan (WP) Task Work	30 days	5/13/2010
608	Draft Final PA/SI CLs and WPs	0 days	6/11/2010
609	Regulatory Review	60 days	6/12/2010
610	EPA Extension Request	0 days	8/10/2010
611	Extended Regulatory Review	20 days	8/11/2010
612	2nd EPA Extension Request/Extended Regulatory Review	20 days	8/31/2010
613	3rd EPA Extension Request/Extended Regulatory Review	20 days	9/20/2010
614	Address Comments	60 days	10/10/2010
615	Final Golf Course CLs and WPs	1 day	12/9/2010
616	Regulatory Approval (Final PA/SI Golf Course CLs WPs)	30 days	12/10/2010
617	**North, Southeast, Southwest AOIs**	**234 days**	**5/21/2010**
618	**Consensus Letters**	**192 days**	**5/21/2010**
619	Draft PA/SI CLs	0 days	5/21/2010
620	Regulatory Review	60 days	5/22/2010
621	EPA Extenstion Request	1 day	7/15/2010
622	Extended Regulatory Review	21 days	7/21/2010



Project: SMP Schedule
Date: 6/8/2011

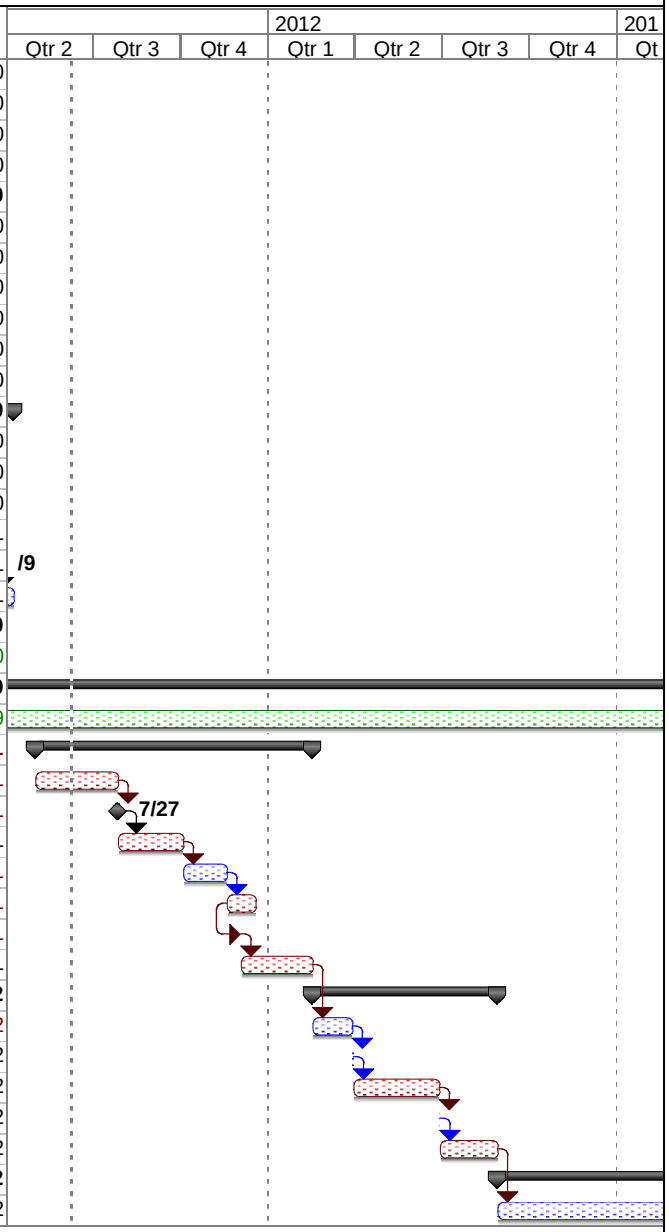
Task

Summary

Submittal to Regulatory Agency

Table 3-2 Project Schedules for Open Sites at Fort Meade

ID	Task Name	Duration	Start
623	2nd EPA Extension Request/Extended Regulatory Review	20 days	8/11/2010
624	Adress Comments	60 days	8/31/2010
625	Draft Final PA/SI CLs	0 days	10/29/2010
626	Regulatory Approval (Final PA/SI CLs North, Southeast, Southwest AOIs)	30 days	10/30/2010
627	**Work Plans**	**171 days**	**7/23/2010**
628	Draft Work Plan Task Work	20 days	7/23/2010
629	Draft PA/SI WPs	0 days	8/11/2010
630	Regulatory Review	60 days	8/13/2010
631	Adress Comments	60 days	10/12/2010
632	Draft Final PA/SI WPs	0 days	12/10/2010
633	Regulatory Approval (Final PA/SI WPs North, Southeast, Southwest AOIs)	30 days	12/11/2010
634	**BRAC and Other AOIs**	**170 days**	**10/21/2010**
635	Draft PA/SI CL and WP Task Work	20 days	10/21/2010
636	Draft PA/SI CL and WP	0 days	11/9/2010
637	Regulatory Review	60 days	11/10/2010
638	Adress Comments	60 days	1/9/2011
639	Draft Final PA/SI CL and WP	0 days	3/9/2011
640	Regulatory Approval (Final PA/SI CLs and WPs BRAC and Other AOIs)	30 days	3/10/2011
641	**FGGM-001-R-01 (OU-38) Clean Fill Dump (BRAC MMRP)**	**62 days**	**6/15/2010**
642	**Remedial Action (Operation)**	62 days	6/15/2010
643	**FGGM-002-R-01 (OU-39) High Explosive Impact and Disposal (BRAC MMRP)**	**7160 days**	**2/20/2009**
644	**Remedial Action (Operation)**	7160 days	2/20/2009
645	**Proposed Plan (Status&timeline to be revised in coordination with EPA requirem**	**291 days**	**5/2/2011**
646	PP Task Work	87 days	5/2/2011
647	Draft PP	0 days	7/27/2011
648	Regulatory Review/Address Comments	68 days	7/28/2011
649	Draft Final PP	46 days	10/4/2011
650	Public Comment Period	30 days	11/19/2011
651	Public Meeting	1 day	12/3/2011
652	Regulatory Approval (Final PP)	75 days	12/4/2011
653	**ROD/LUCIP**	**194 days**	**2/17/2012**
654	Draft ROD/LUCIP Task Work	42 days	2/17/2012
655	Draft ROD/LUCIP	1 day	3/30/2012
656	Regulatory Review/Address Comments	90 days	3/31/2012
657	Draft Final ROD/LUCIP	1 day	6/29/2012
658	Regulatory Approval (Final ROD/LUCIP)	60 days	6/30/2012
659	**RD/RA**	**3522 days**	**8/29/2012**
660	Remedial Action (Operation)	3522 days	8/29/2012

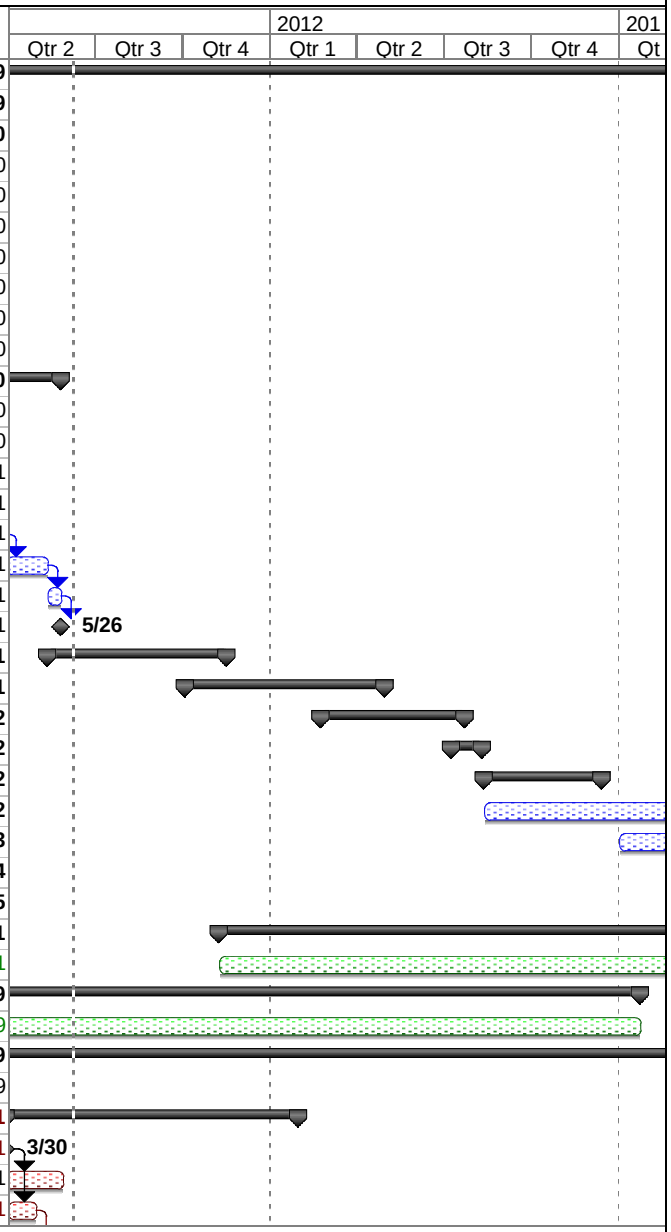


Project: SMP Schedule
Date: 6/8/2011

Task
Summary
Submittal to Regulatory Agency

Table 3-2 Project Schedules for Open Sites at Fort Meade

ID	Task Name	Duration	Start
661	**FGGM-003-R-01 (OU-40) Mortar Range (MMRP)**	**2255 days**	**10/28/2009**
662	**Remedial Investigation Work Plan**	**77 days**	**10/28/2009**
667	**Complete Remedial Investigation Report**	**344 days**	**1/13/2010**
668	Prepare Draft Final	101 days	1/13/2010
669	Army Review	37 days	4/26/2010
670	MDE Review	30 days	6/2/2010
671	EPA Review	143 days	6/2/2010
672	Comment Resolution	47 days	10/23/2010
673	Final	14 days	12/9/2010
674	Approved RI	0 days	12/22/2010
675	**Feasibility Study**	**169 days**	**12/9/2010**
676	Draft	19 days	12/9/2010
677	Army Review	22 days	12/28/2010
678	Draft Final	10 days	1/19/2011
679	MDE Review	30 days	1/31/2011
680	EPA Review	58 days	1/31/2011
681	Comment Resolution	44 days	3/30/2011
682	Final	14 days	5/13/2011
683	Approved FS	0 days	5/26/2011
684	**Proposed Plan**	**188 days**	**5/13/2011**
695	**Decision Document**	**210 days**	**10/4/2011**
706	**Remedial Design (Includes ESS if required)**	**151 days**	**2/24/2012**
715	**Remedial Action**	**32 days**	**7/10/2012**
719	**Remedial Action Report**	**124 days**	**8/13/2012**
727	**LTO/LTM**	**325 days**	**8/13/2012**
728	**Year 2 (2013)**	**364 days**	**1/2/2013**
729	**Year 3 (2014)**	**364 days**	**1/2/2014**
730	**Year 4 (2015)**	**363 days**	**1/2/2015**
731	**FGGM-007-R-01 (OU-44) Inactive Landfill 2 (IAL2) (MMRP)**	**6430 days**	**11/9/2011**
732	**Remedial Action (Operation)**	6430 days	11/9/2011
733	**FGGM 10 (OU-8) (part of Tipton Groundwater OU, BRAC)**	**1420 days**	**3/6/2009**
734	**Remedial Action (Operation)**	1420 days	3/6/2009
735	**FGGM 20 (OU-15) Ordnance Demo Area (BRAC)**	**3047 days**	**9/29/2009**
736	Widthdraw December 2005 Decision Document	31 days	9/29/2009
737	**Proposed Plan/ROD**	**307 days**	**3/30/2011**
738	Draft Final PP	0 days	3/30/2011
739	Regulatory Review/Address Comments	60 days	3/30/2011
740	Public Comment Period	30 days	4/1/2011

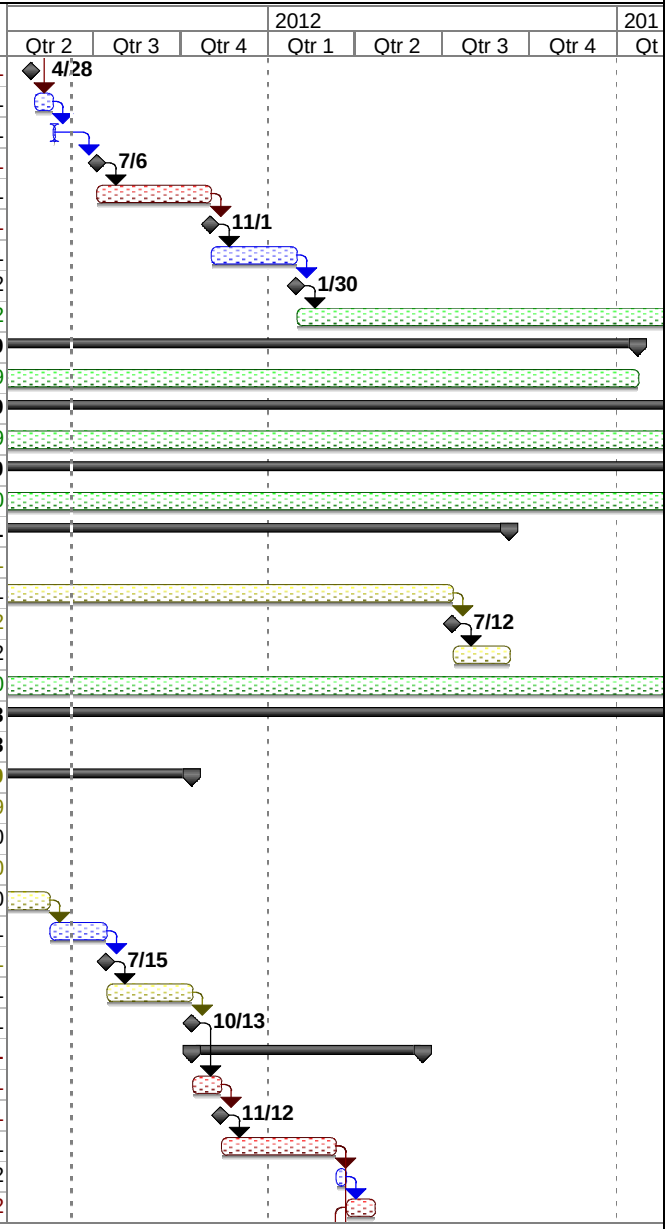


Project: SMP Schedule
Date: 6/8/2011

Task
Summary
Submittal to Regulatory Agency

Table 3-2 Project Schedules for Open Sites at Fort Meade

ID	Task Name	Duration	Start
741	Public Meeting	0 days	4/28/2011
742	Prepare Final PP	19 days	5/1/2011
743	Regulatory Approval (Final PP)	2 days	5/20/2011
744	Draft ROD	0 days	7/6/2011
745	Regulatory Review/Address Comments	120 days	7/5/2011
746	Draft Final ROD	0 days	11/1/2011
747	Regulatory Approval	90 days	11/2/2011
748	Final ROD	0 days	1/30/2012
749	**Remedial Action (Operation)**	2193 days	1/31/2012
750	**FGGM 31 (OU-17) (part of Tipton Groundwater OU, BRAC)**	**1420 days**	**3/6/2009**
751	**Remedial Action (Operation)**	1420 days	3/6/2009
752	**FGGM 81 (OU-33) Clean Fill Dump (BRAC)**	**2041 days**	**3/6/2009**
753	**Remedial Action (Operation)**	2041 days	3/6/2009
754	**FGGM 85 (OU-35) UXO Tipton Army Airfield (BRAC MMRP)**	**4776 days**	**6/9/2010**
755	**Remedial Action (Operation)**	4590 days	12/12/2010
756	**Explanation of Significant Difference (ESD)**	**610 days**	**1/10/2011**
757	Draft ESD	0 days	1/10/2011
758	Regulatory Review/Address Comments	550 days	1/10/2011
759	Draft Final ESD	0 days	7/12/2012
760	Regulatory Approval (Final ESD)	60 days	7/13/2012
761	**Remedial Action (Operation)**	4600 days	6/9/2010
762	**FGGM 94 (OU-37) Trap And Skeet Range 17 (BRAC)**	**2094 days**	**8/18/2008**
763	**RFI Work Plan**	**460 days**	**8/18/2008**
769	**RI/FS Report**	**711 days**	**11/2/2009**
770	RI/FS Fieldwork/Analytical	137 days	11/2/2009
771	RI/FS Task Work	99 days	3/19/2010
772	Draft RI/FS Report	0 days	6/25/2010
773	Regulatory Review	325 days	6/26/2010
774	Address Comments	60 days	5/17/2011
775	Draft Final RI/FS Report	0 days	7/15/2011
776	Regulatory Review/Adress Comments	90 days	7/16/2011
777	Final RI/FS Report	0 days	10/13/2011
778	**Proposed Plan**	**242 days**	**10/14/2011**
779	PP Task Work	30 days	10/14/2011
780	Draft PP	0 days	11/12/2011
781	Regulatory Review/Address Comments	120 days	11/13/2011
782	Draft Final PP	11 days	3/12/2012
783	Public Comment Period	30 days	3/23/2012



Project: SMP Schedule
Date: 6/8/2011

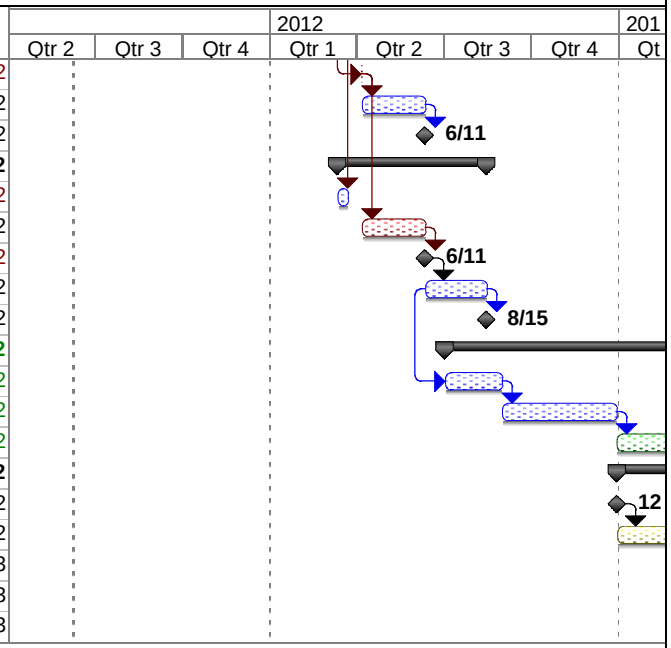
Task

Summary

Submittal to Regulatory Agency

Table 3-2 Project Schedules for Open Sites at Fort Meade

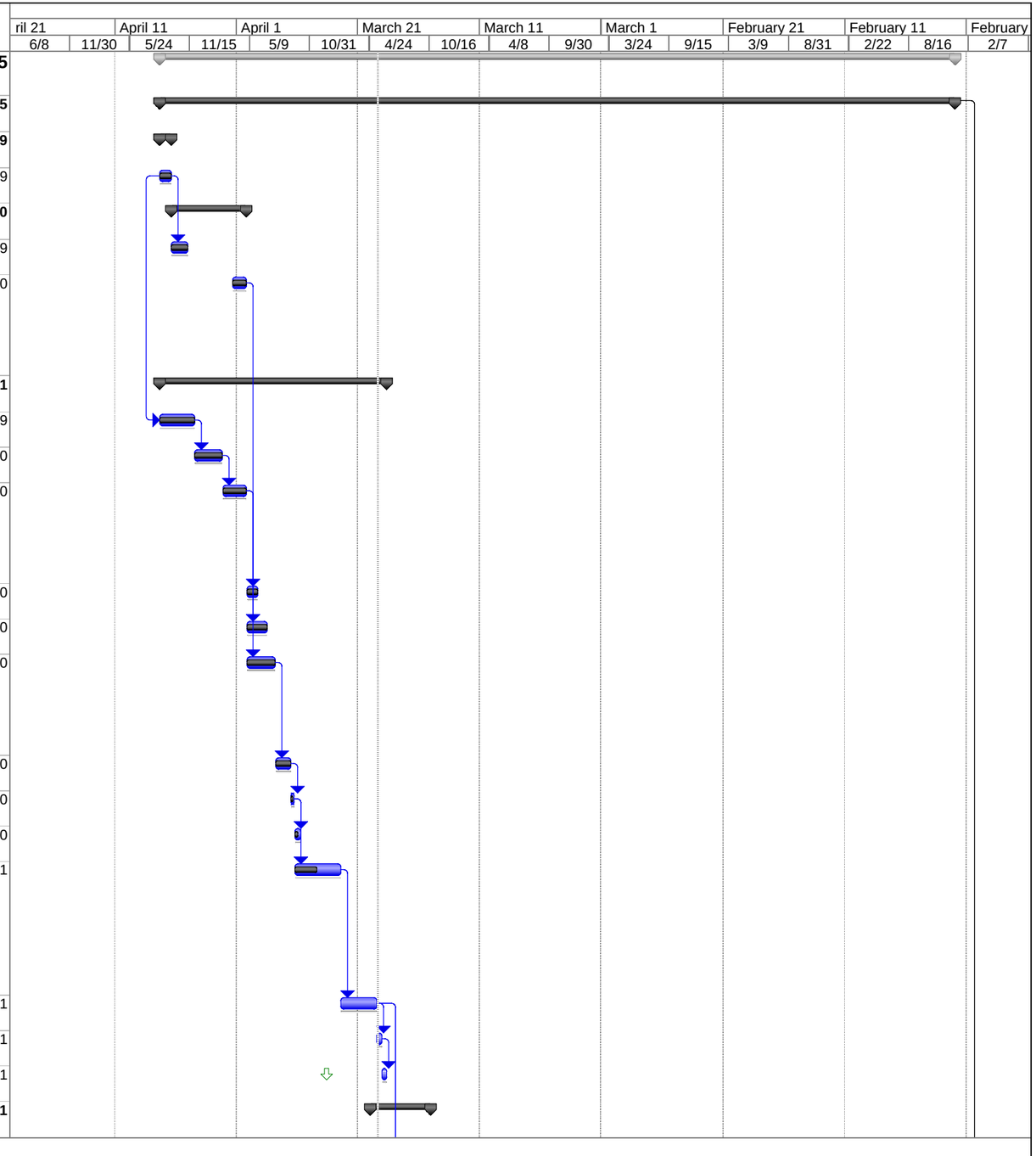
ID	Task Name	Duration	Start
784	Public Meeting	1 day	4/6/2012
785	Regulatory Review/Adress Comments	66 days	4/7/2012
786	Final PP	0 days	6/11/2012
787	**ROD**	**157 days**	**3/12/2012**
788	Draft ROD	11 days	3/12/2012
789	Regulatory Review/Address Comments	66 days	4/7/2012
790	Draft Final ROD	0 days	6/11/2012
791	Regulatory Review/Adress Comments	65 days	6/12/2012
792	Final ROD	0 days	8/15/2012
793	**RD/RA**	**679 days**	**7/3/2012**
794	Remedial Design	60 days	7/3/2012
795	Remedial Action (Construction)	120 days	9/1/2012
796	**Remedial Action (Operation)**	499 days	12/30/2012
797	**6-Acre Little Patuxent River Site**	**300 days**	**12/31/2012**
798	Draft Environmental Condition of Property (ECP)	0 days	12/31/2012
799	Regulatory Review/Address Comments	120 days	12/31/2012
800	Draft Final ECP	0 days	4/29/2013
801	Regulatory Review/Address Comments	120 days	4/30/2013
802	Final ECP	60 days	8/28/2013



Project: SMP Schedule
Date: 6/8/2011

Task
Summary
Submittal to Regulatory Agency

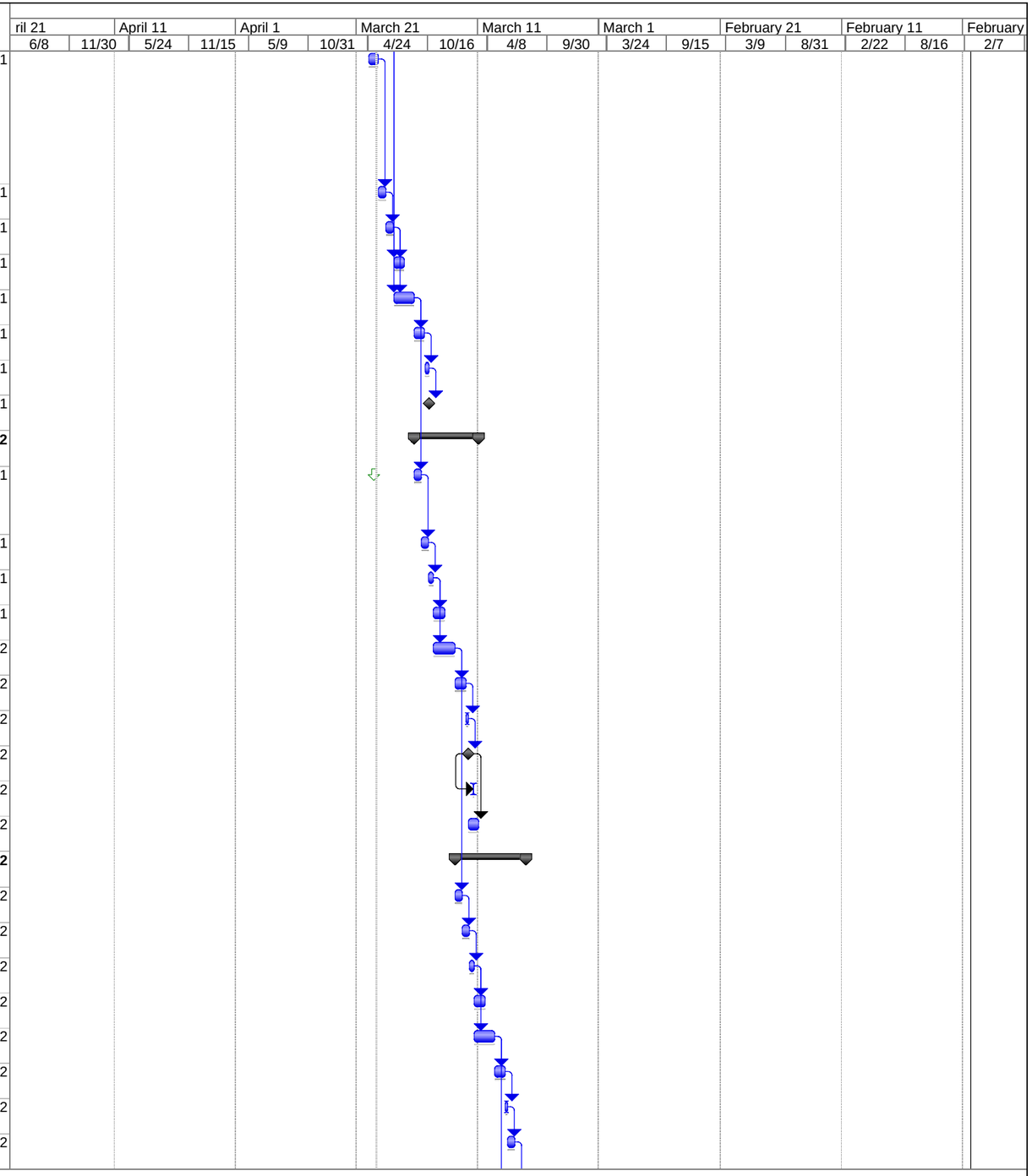
ID	Task Name	Duration	Start	Finish
0	**FGGM 13 (Pesticide Shop) and FGGM 17 (CSL)**	**1618 days**	**Fri 8/21/09**	**Thu 12/31/15**
1	**FGGM-13 - Pesticide Shop Building 6621**	**1617 days**	**Fri 8/21/09**	**Wed 12/30/15**
2	**Remedial Investigation Work Plan**	**24 days**	**Fri 8/21/09**	**Wed 9/23/09**
3	Prepare Groundwater Sampling Work Plan	24 days	Fri 8/21/09	Wed 9/23/09
4	**RI Field Investigation**	**156 days**	**Thu 9/24/09**	**Fri 4/30/10**
5	GW Sampling	34 days	Thu 9/24/09	Tue 11/10/09
6	Well Install/Develop/Sample	30 days	Mon 3/22/10	Fri 4/30/10
7	**Remedial Investigation Report**	**464 days**	**Fri 8/21/09**	**Tue 6/14/11**
8	EPA/MDE Review of RI Report	72 days	Fri 8/21/09	Mon 11/30/09
9	Supplemental Draft RI Work Plan/RI RTCs to Army	58 days	Tue 12/1/09	Fri 2/19/10
10	Army Review	50 days	Mon 2/22/10	Fri 4/30/10
11	MDE Review	22 days	Mon 5/3/10	Wed 6/2/10
12	EPA Review	42 days	Mon 5/3/10	Wed 6/30/10
13	Draft RI	58 days	Mon 5/3/10	Fri 7/23/10
14	Army Review	31 days	Mon 7/26/10	Tue 9/7/10
15	Draft Final RI	8 days	Wed 9/8/10	Fri 9/17/10
16	MDE Review	13 days	Mon 9/20/10	Wed 10/6/10
17	EPA Review	92 days	Mon 9/20/10	Mon 1/31/11
18	Comment Resolution	75 days	Tue 2/1/11	Mon 5/16/11
19	Final	10 days	Tue 5/17/11	Tue 5/31/11
20	Approved RI	10 days	Wed 6/1/11	Tue 6/14/11
21	**Feasibility Study**	**124 days**	**Thu 4/28/11**	**Fri 10/21/11**



Project: FGGM 13 (Pesticide Shop) ar
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

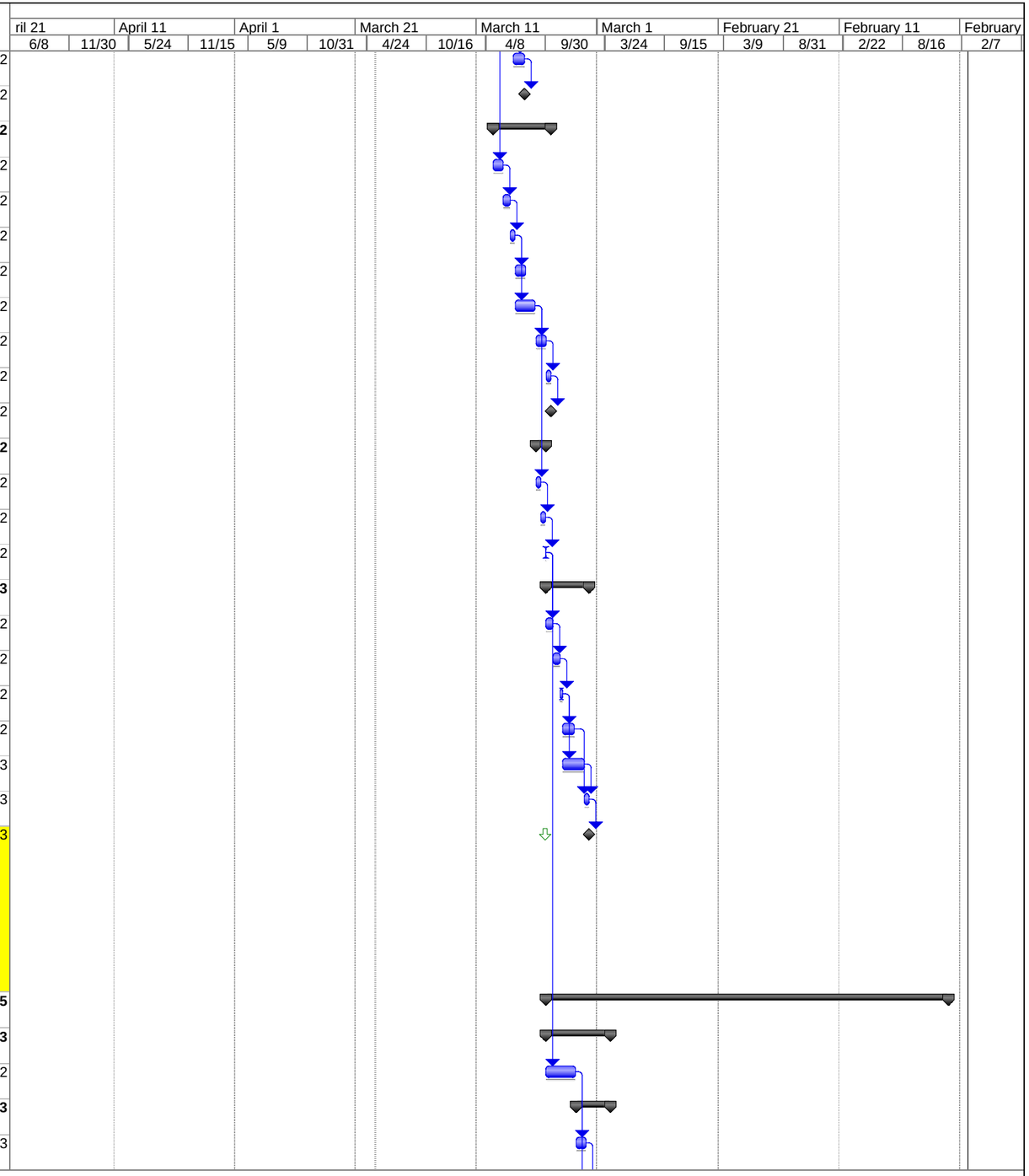
ID	Task Name	Duration	Start	Finish
22	Draft FS	20 days	Thu 4/28/11	Wed 5/25/11
23	Army Review	15 days	Thu 5/26/11	Thu 6/16/11
24	Draft Final FS	15 days	Fri 6/17/11	Fri 7/8/11
25	MDE Review	22 days	Mon 7/11/11	Tue 8/9/11
26	EPA Review	42 days	Mon 7/11/11	Wed 9/7/11
27	Comment Resolution	22 days	Thu 9/8/11	Fri 10/7/11
28	Final	10 days	Mon 10/10/11	Fri 10/21/11
29	Approved FS	0 days	Fri 10/21/11	Fri 10/21/11
30	**Proposed Plan**	**131 days**	**Thu 9/8/11**	**Wed 3/14/12**
31	Draft	15 days	Thu 9/8/11	Wed 9/28/11
32	Army Review	15 days	Thu 9/29/11	Wed 10/19/11
33	Draft Final	10 days	Thu 10/20/11	Wed 11/2/11
34	MDE Review	22 days	Thu 11/3/11	Tue 12/6/11
35	EPA Review	42 days	Thu 11/3/11	Thu 1/5/12
36	Comment Resolution	22 days	Fri 1/6/12	Mon 2/6/12
37	Prepare Final	5 days	Tue 2/7/12	Mon 2/13/12
38	Approved Proposed Plan	0 days	Mon 2/13/12	Mon 2/13/12
39	Public Meeting	1 day	Tue 2/28/12	Tue 2/28/12
40	Public Comment Period	22 days	Tue 2/14/12	Wed 3/14/12
41	**Decision Document**	**146 days**	**Fri 1/6/12**	**Tue 7/31/12**
42	Draft	15 days	Fri 1/6/12	Thu 1/26/12
43	Army Review	15 days	Fri 1/27/12	Thu 2/16/12
44	Draft Final	10 days	Fri 2/17/12	Thu 3/1/12
45	MDE Review	22 days	Fri 3/2/12	Mon 4/2/12
46	EPA Review	42 days	Fri 3/2/12	Mon 4/30/12
47	Comment Resolution	22 days	Tue 5/1/12	Thu 5/31/12
48	Final	5 days	Fri 6/1/12	Thu 6/7/12
49	Army Signature	15 days	Fri 6/8/12	Thu 6/28/12



Project: FGGM 13 (Pesticide Shop) ar
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

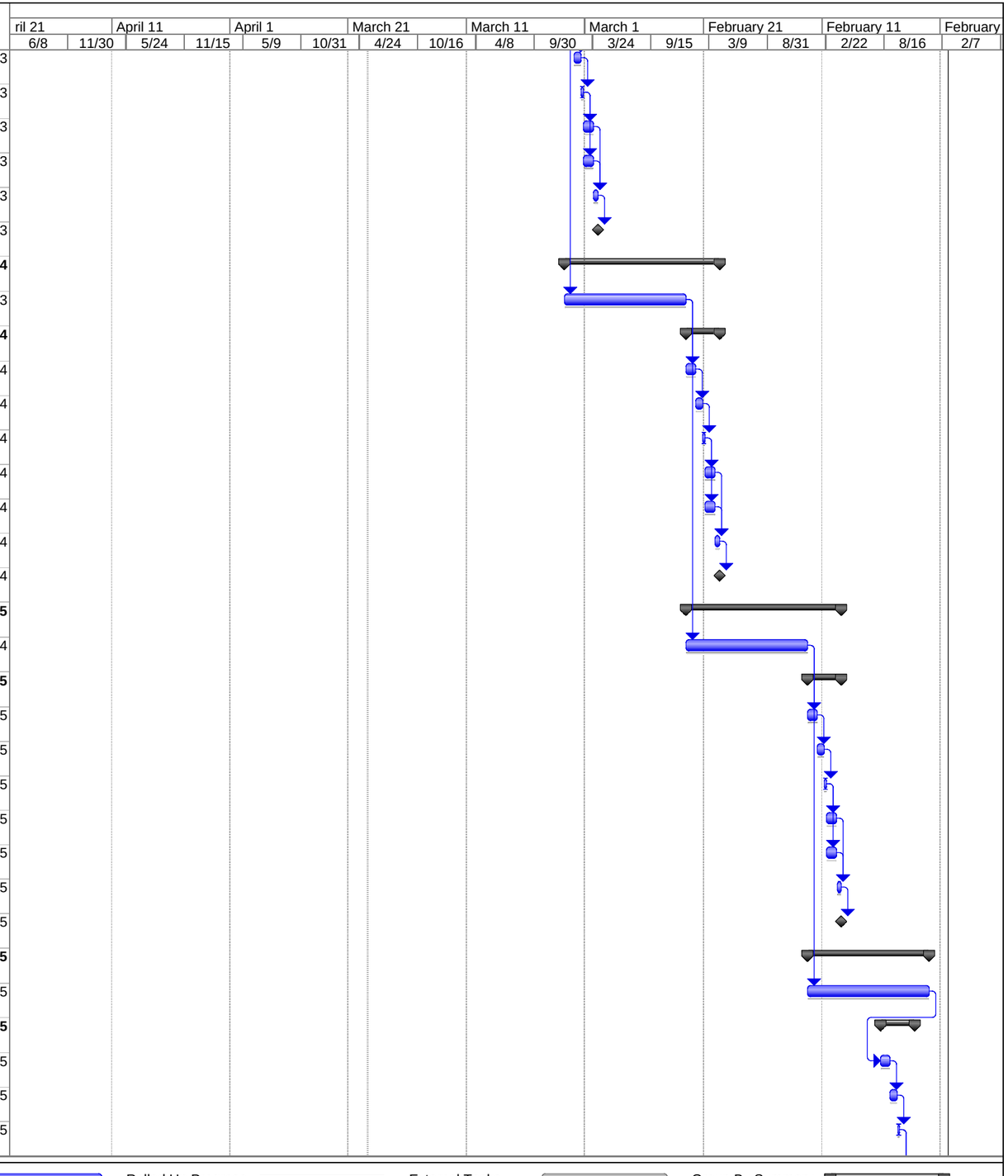
ID	Task Name	Duration	Start	Finish
50	EPA Legal and Signature	22 days	Fri 6/29/12	Tue 7/31/12
51	Signed DD	0 days	Tue 7/31/12	Tue 7/31/12
52	**Remedial Design**	**119 days**	**Tue 5/1/12**	**Wed 10/17/12**
53	Draft	20 days	Tue 5/1/12	Tue 5/29/12
54	Army Review	15 days	Wed 5/30/12	Tue 6/19/12
55	Draft Final	10 days	Wed 6/20/12	Tue 7/3/12
56	MDE Review	22 days	Thu 7/5/12	Fri 8/3/12
57	EPA Review	42 days	Thu 7/5/12	Fri 8/31/12
58	Comment Resolution	22 days	Tue 9/4/12	Wed 10/3/12
59	Final	10 days	Thu 10/4/12	Wed 10/17/12
60	Approved RD	0 days	Wed 10/17/12	Wed 10/17/12
61	**Remedial Action**	**21 days**	**Tue 9/4/12**	**Tue 10/2/12**
62	Mobilization (Procurement/Planning)	10 days	Tue 9/4/12	Mon 9/17/12
63	CM/Implement RA	10 days	Tue 9/18/12	Mon 10/1/12
64	Demobilization	1 day	Tue 10/2/12	Tue 10/2/12
65	**Remedial Action Report**	**87 days**	**Wed 10/3/12**	**Wed 2/6/13**
66	Draft	15 days	Wed 10/3/12	Tue 10/23/12
67	Army Review	15 days	Wed 10/24/12	Tue 11/13/12
68	Draft Final	5 days	Wed 11/14/12	Tue 11/20/12
69	MDE Review	22 days	Wed 11/21/12	Mon 12/24/12
70	EPA Review	42 days	Wed 11/21/12	Wed 1/23/13
71	Final	10 days	Thu 1/24/13	Wed 2/6/13
72	Approved RAR (GW RIP and Soil RC)	0 days	Wed 2/6/13	Wed 2/6/13
73	**LTO/LTM**	**822 days**	**Wed 10/3/12**	**Wed 12/30/15**
74	**Year 1 (2012)**	**132 days**	**Wed 10/3/12**	**Wed 4/10/13**
75	LTO/LTM	60 days	Wed 10/3/12	Fri 12/28/12
76	**Annual Report**	**72 days**	**Mon 12/31/12**	**Wed 4/10/13**
77	Draft	20 days	Mon 12/31/12	Mon 1/28/13



Project: FGGM 13 (Pesticide Shop) ar
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

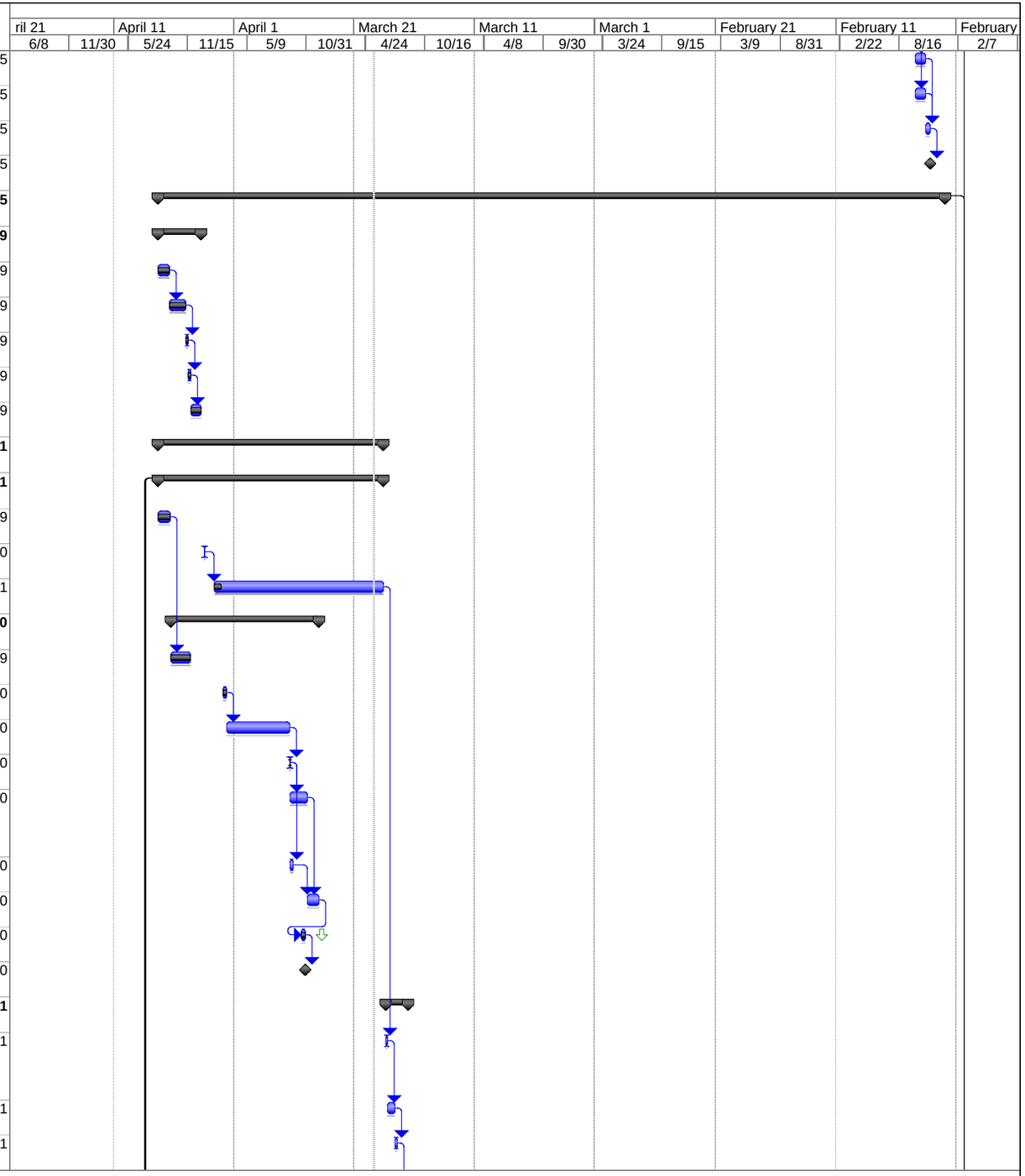
ID	Task Name	Duration	Start	Finish
78	Army Review	15 days	Tue 1/29/13	Mon 2/18/13
79	Draft Final	5 days	Tue 2/19/13	Mon 2/25/13
80	MDE Review	22 days	Tue 2/26/13	Wed 3/27/13
81	EPA Review	22 days	Tue 2/26/13	Wed 3/27/13
82	Final	10 days	Thu 3/28/13	Wed 4/10/13
83	Approved	0 days	Wed 4/10/13	Wed 4/10/13
84	**Year 2 (2013)**	**326 days**	**Mon 12/31/12**	**Thu 4/10/14**
85	LTO/LTM	254 days	Mon 12/31/12	Mon 12/30/13
86	**Annual Report**	**72 days**	**Tue 12/31/13**	**Thu 4/10/14**
87	Draft	20 days	Tue 12/31/13	Tue 1/28/14
88	Army Review	15 days	Wed 1/29/14	Tue 2/18/14
89	Draft Final	5 days	Wed 2/19/14	Tue 2/25/14
90	MDE Review	22 days	Wed 2/26/14	Thu 3/27/14
91	EPA Review	22 days	Wed 2/26/14	Thu 3/27/14
92	Final	10 days	Fri 3/28/14	Thu 4/10/14
93	Approved	0 days	Thu 4/10/14	Thu 4/10/14
94	**Year 3 (2014)**	**326 days**	**Tue 12/31/13**	**Fri 4/10/15**
95	LTO/LTM	254 days	Tue 12/31/13	Tue 12/30/14
96	**Annual Report**	**72 days**	**Wed 12/31/14**	**Fri 4/10/15**
97	Draft	20 days	Wed 12/31/14	Wed 1/28/15
98	Army Review	15 days	Thu 1/29/15	Wed 2/18/15
99	Draft Final	5 days	Thu 2/19/15	Wed 2/25/15
100	MDE Review	22 days	Thu 2/26/15	Fri 3/27/15
101	EPA Review	22 days	Thu 2/26/15	Fri 3/27/15
102	Final	10 days	Mon 3/30/15	Fri 4/10/15
103	Approved	0 days	Fri 4/10/15	Fri 4/10/15
104	**Year 4 (2015)**	**254 days**	**Wed 12/31/14**	**Wed 12/30/15**
105	LTO/LTM	254 days	Wed 12/31/14	Wed 12/30/15
106	**Annual Report**	**72 days**	**Fri 8/7/15**	**Tue 11/17/15**
107	Draft	20 days	Fri 8/7/15	Thu 9/3/15
108	Army Review	15 days	Fri 9/4/15	Fri 9/25/15
109	Draft Final	5 days	Mon 9/28/15	Fri 10/2/15



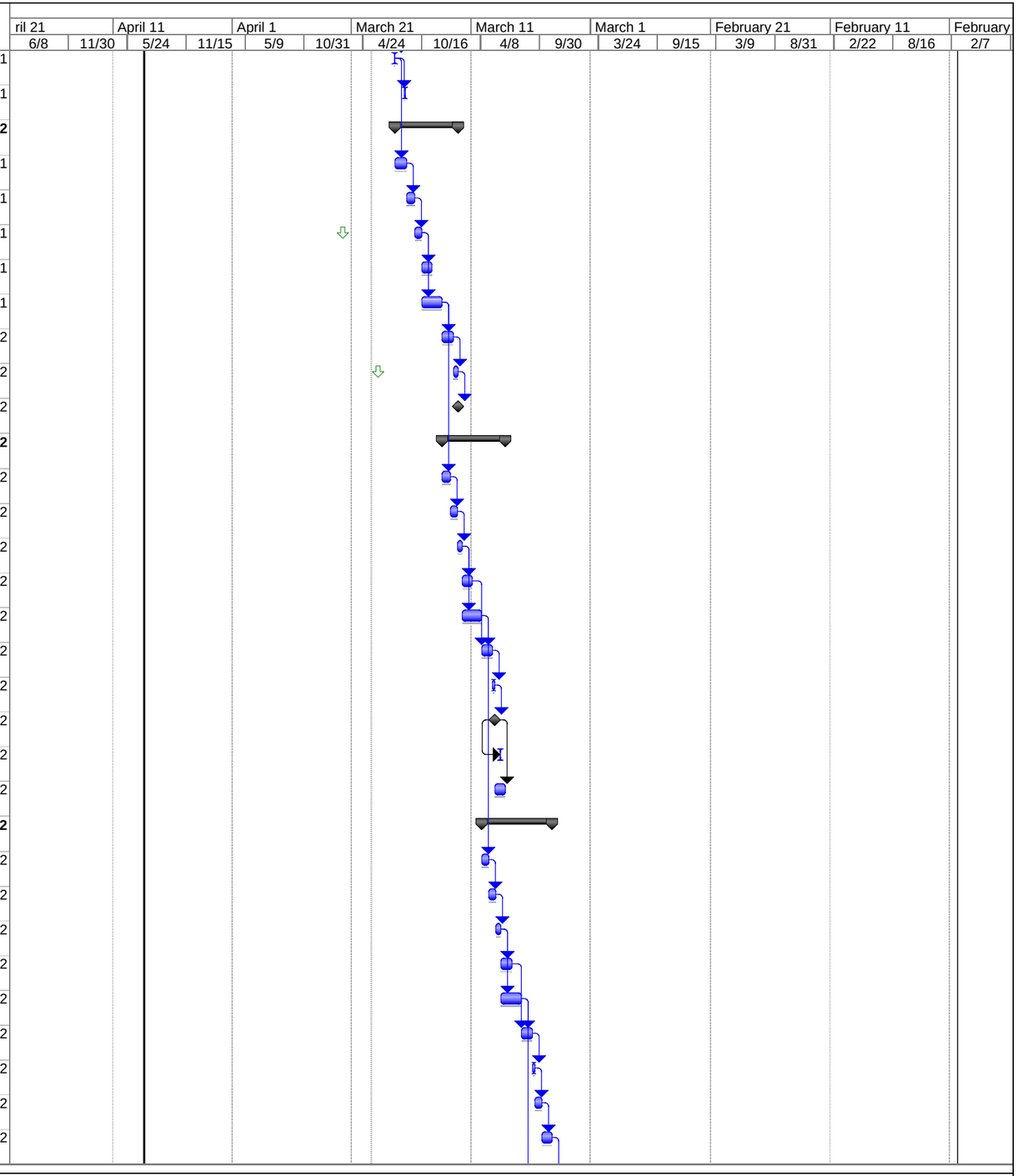
Project: FGGM 13 (Pesticide Shop) ar
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

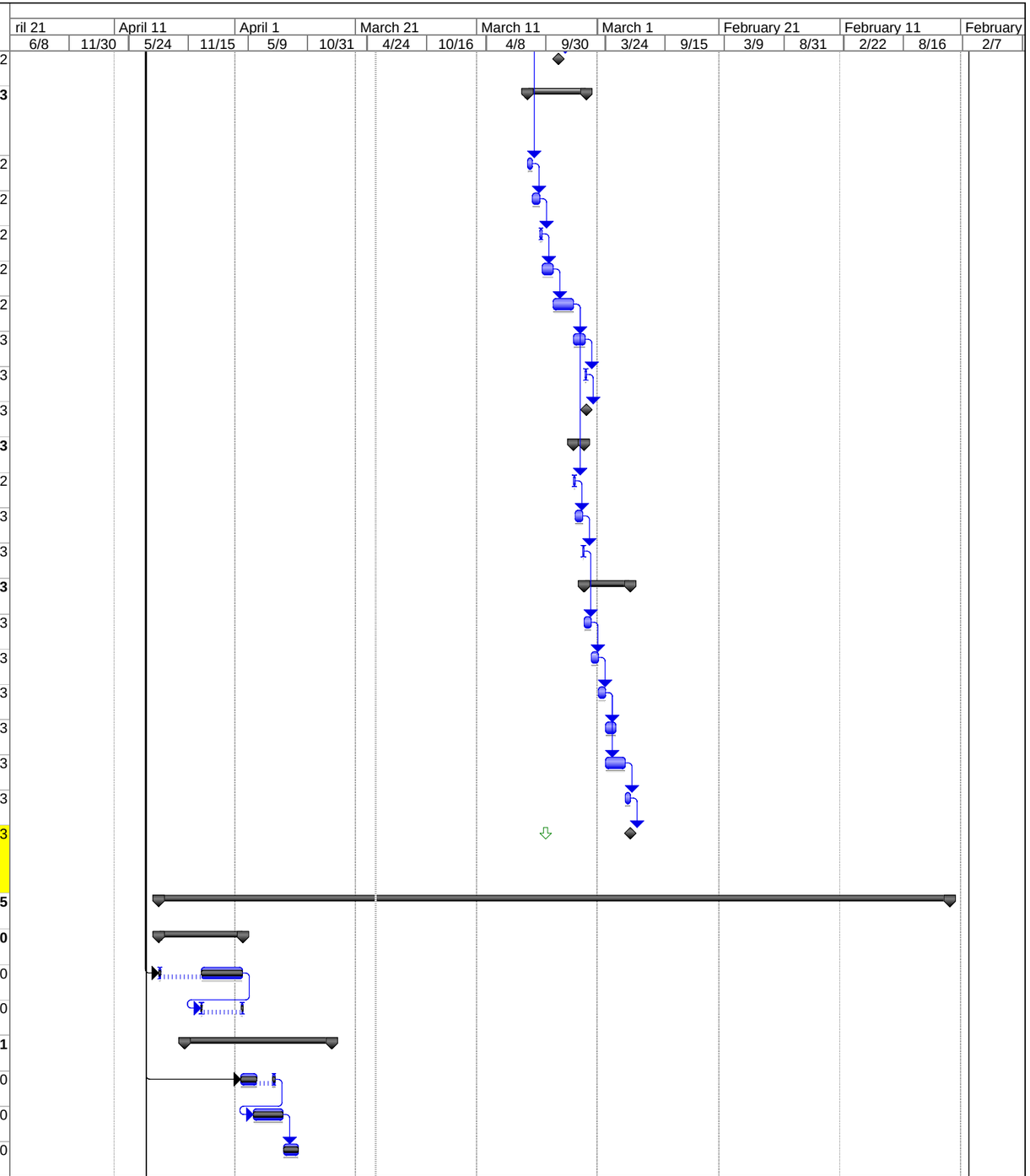
ID	Task Name	Duration	Start	Finish
110	MDE Review	22 days	Mon 10/5/15	Tue 11/3/15
111	EPA Review	22 days	Mon 10/5/15	Tue 11/3/15
112	Final	10 days	Wed 11/4/15	Tue 11/17/15
113	Approved	0 days	Tue 11/17/15	Tue 11/17/15
114	**FGGM-17 - Closed Sanitary Landfill**	**1618 days**	**Fri 8/21/09**	**Thu 12/31/15**
115	**Remedial Investigation**	**91 days**	**Fri 8/21/09**	**Fri 12/25/09**
116	EPA Review and Comment on Final RI	24 days	Fri 8/21/09	Wed 9/23/09
117	Prepare RTCs/Submit to Army	34 days	Thu 9/24/09	Tue 11/10/09
118	Army Review	5 days	Wed 11/11/09	Tue 11/17/09
119	Army Submittal to EPA/MDE	6 days	Wed 11/18/09	Wed 11/25/09
120	Comment Resolution on RTCs	22 days	Thu 11/26/09	Fri 12/25/09
121	**Pre-FS Investigation Work Plans**	**466.5 days**	**Fri 8/21/09**	**Fri 6/17/11**
122	**ROE Request (Amtrak)**	**466.5 days**	**Fri 8/21/09**	**Fri 6/17/11**
123	Prepare/Submit ROE Request	26 days	Fri 8/21/09	Fri 9/25/09
124	Amtrak ROE Meeting	1 day	Tue 1/5/10	Tue 1/5/10
125	ROE Negotiation	350 days	Tue 2/2/10	Fri 6/17/11
126	**Investigation Work Plan**	**307 days**	**Mon 9/28/09**	**Wed 12/8/10**
127	Evaluate Site Data/CSM	42 days	Mon 9/28/09	Tue 11/24/09
128	Draft	9 days	Mon 3/1/10	Thu 3/11/10
129	Army Review	129 days	Fri 3/12/10	Mon 9/13/10
130	Draft Final	1 day	Tue 9/14/10	Tue 9/14/10
131	MDE Review	37 days	Wed 9/15/10	Thu 11/4/10
132	EPA Review	7 days	Wed 9/15/10	Thu 9/23/10
133	Comment Resolution	22 days	Fri 11/5/10	Wed 12/8/10
134	Final	10 days	Mon 10/18/10	Fri 10/29/10
135	Approved Work Plan	0 days	Fri 10/29/10	Fri 10/29/10
136	**Pre-FS Investigation**	**45 days**	**Fri 6/24/11**	**Mon 8/29/11**
137	Geoprobe Investigation	3 days	Fri 6/24/11	Wed 6/29/11
138	Data Analysis	15 days	Wed 6/29/11	Thu 7/21/11
139	Well Installation	5 days	Thu 7/21/11	Thu 7/28/11



ID	Task Name	Duration	Start	Finish
140	Groundwater Sampling 1	1 day	Thu 7/28/11	Fri 7/29/11
141	Groundwater Sampling 2	1 day	Fri 8/26/11	Mon 8/29/11
142	**Feasibility Study**	**129 days**	**Fri 7/29/11**	**Thu 2/2/12**
143	Draft	25 days	Fri 7/29/11	Fri 9/2/11
144	Army Review	15 days	Fri 9/2/11	Mon 9/26/11
145	Draft Final	15 days	Mon 9/26/11	Mon 10/17/11
146	MDE Review	22 days	Mon 10/17/11	Wed 11/16/11
147	EPA Review	42 days	Mon 10/17/11	Fri 12/16/11
148	Comment Resolution	22 days	Fri 12/16/11	Thu 1/19/12
149	Final	10 days	Thu 1/19/12	Thu 2/2/12
150	Approved FS	0 days	Thu 2/2/12	Thu 2/2/12
151	**Proposed Plan**	**131 days**	**Fri 12/16/11**	**Thu 6/21/12**
152	Draft	15 days	Fri 12/16/11	Tue 1/10/12
153	Army Review	15 days	Tue 1/10/12	Tue 1/31/12
154	Draft Final	10 days	Tue 1/31/12	Tue 2/14/12
155	MDE Review	22 days	Tue 2/14/12	Thu 3/15/12
156	EPA Review	42 days	Tue 2/14/12	Thu 4/12/12
157	Comment Resolution	22 days	Thu 4/12/12	Mon 5/14/12
158	Prepare Final	5 days	Mon 5/14/12	Mon 5/21/12
159	Approved Proposed Plan	0 days	Mon 5/21/12	Mon 5/21/12
160	Public Meeting	2 days	Tue 6/5/12	Thu 6/7/12
161	Public Comment Period	22 days	Mon 5/21/12	Thu 6/21/12
162	**Decision Document**	**146 days**	**Thu 4/12/12**	**Wed 11/7/12**
163	Draft	15 days	Thu 4/12/12	Thu 5/3/12
164	Army Review	15 days	Thu 5/3/12	Thu 5/24/12
165	Draft Final	10 days	Thu 5/24/12	Fri 6/8/12
166	MDE Review	22 days	Fri 6/8/12	Wed 7/11/12
167	EPA Review	42 days	Fri 6/8/12	Wed 8/8/12
168	Comment Resolution	22 days	Wed 8/8/12	Mon 9/10/12
169	Final	5 days	Mon 9/10/12	Mon 9/17/12
170	Army Signature	15 days	Mon 9/17/12	Mon 10/8/12
171	EPA Legal and Signature	22 days	Mon 10/8/12	Wed 11/7/12



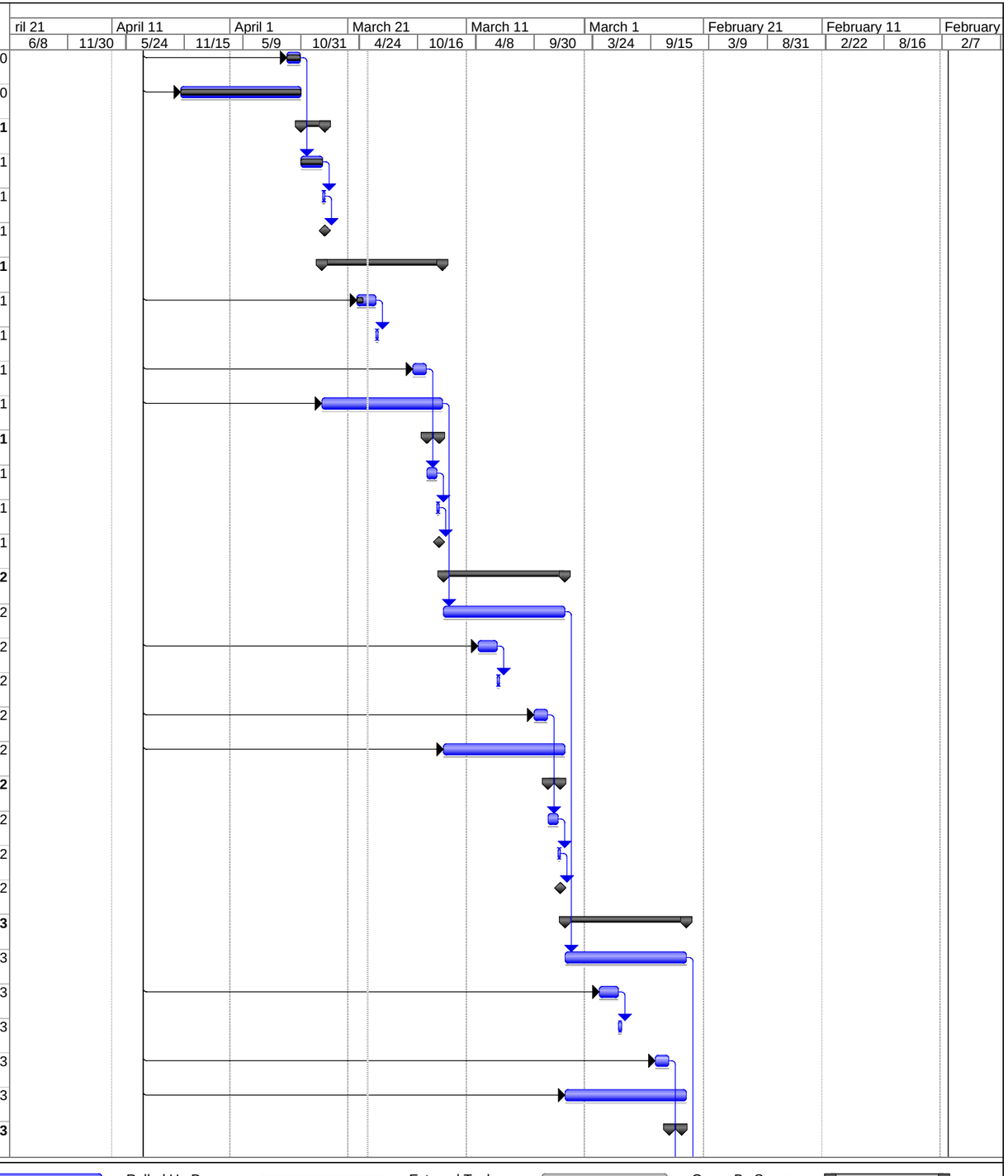
ID	Task Name	Duration	Start	Finish
172	Signed DD	0 days	Wed 11/7/12	Wed 11/7/12
173	**Remedial Design**	**118 days**	**Wed 8/8/12**	**Mon 1/28/13**
174	Draft	10 days	Wed 8/8/12	Wed 8/22/12
175	Army Review	15 days	Wed 8/22/12	Thu 9/13/12
176	Draft Final	5 days	Thu 9/13/12	Thu 9/20/12
177	MDE Review	22 days	Thu 9/20/12	Mon 10/22/12
178	EPA Review	42 days	Mon 10/22/12	Fri 12/21/12
179	Comment Resolution	22 days	Fri 12/21/12	Thu 1/24/13
180	Final	2 days	Thu 1/24/13	Mon 1/28/13
181	Approved RD	0 days	Mon 1/28/13	Mon 1/28/13
182	**Remedial Action**	**19 days**	**Fri 12/21/12**	**Mon 1/21/13**
183	Mobilization	2 days	Fri 12/21/12	Wed 12/26/12
184	Implement RA	15 days	Wed 12/26/12	Thu 1/17/13
185	Demobilization	2 days	Thu 1/17/13	Mon 1/21/13
186	**Remedial Action Report**	**97 days**	**Mon 1/21/13**	**Thu 6/6/13**
187	Draft	15 days	Mon 1/21/13	Mon 2/11/13
188	Army Review	15 days	Mon 2/11/13	Mon 3/4/13
189	Draft Final	15 days	Mon 3/4/13	Mon 3/25/13
190	MDE Review	22 days	Mon 3/25/13	Wed 4/24/13
191	EPA Review	42 days	Mon 3/25/13	Wed 5/22/13
192	Final	10 days	Wed 5/22/13	Thu 6/6/13
193	Approved RAR (GW RIP and SL RC)	0 days	Thu 6/6/13	Thu 6/6/13
194	**LTO/LTM**	**1618 days**	**Fri 8/21/09**	**Thu 12/31/15**
195	**Year 1 (2009)**	**175 days**	**Fri 8/21/09**	**Sun 4/25/10**
196	Monthly Gauging (3 months)	175 days	Fri 8/21/09	Fri 4/23/10
197	Data Management/Transmittal	87 days	Wed 12/23/09	Sun 4/25/10
198	**Year 2 (2010)**	**301 days**	**Thu 11/5/09**	**Tue 1/11/11**
199	Semi-Annual Event 1	71 days	Mon 4/19/10	Wed 7/28/10
200	Interim Report	61 days	Wed 5/26/10	Fri 8/20/10
201	EPA Approval	30 days	Mon 8/23/10	Mon 10/4/10



Project: FGGM 13 (Pesticide Shop) ar
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

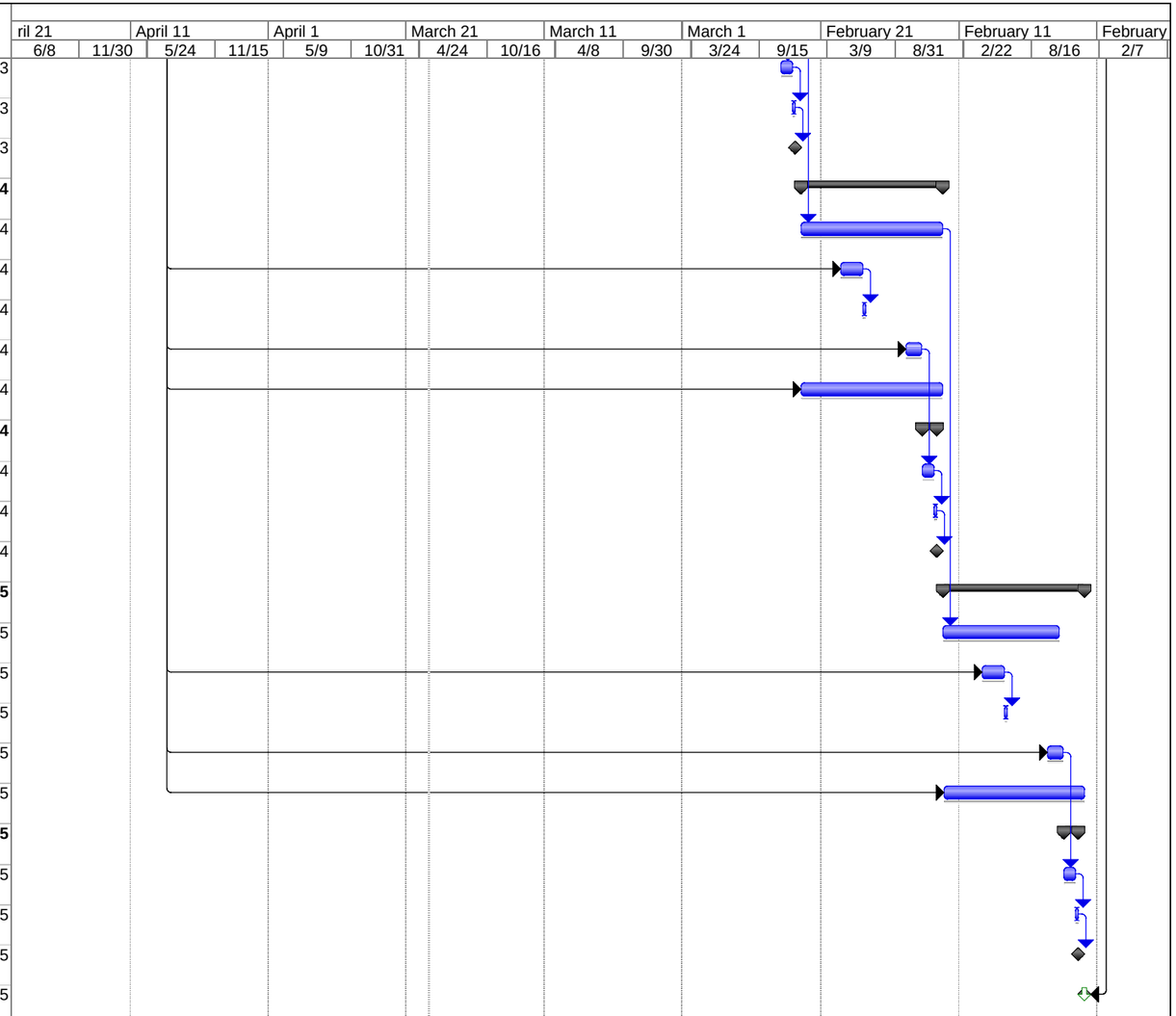
ID	Task Name	Duration	Start	Finish
202	Semi-Annual Event 2	30 days	Mon 9/20/10	Fri 10/29/10
203	Monthly Gauging	253 days	Thu 11/5/09	Sun 10/31/10
204	**Annual Report**	**48 days**	**Mon 11/1/10**	**Tue 1/11/11**
205	Draft	43 days	Mon 11/1/10	Tue 1/4/11
206	Final	5 days	Wed 1/5/11	Tue 1/11/11
207	Approved	0 days	Tue 1/11/11	Tue 1/11/11
208	**Year 3 (2011)**	**254 days**	**Mon 1/3/11**	**Fri 12/30/11**
209	Semi-Annual Event 1	40 days	Mon 4/18/11	Mon 6/13/11
210	Interim Report	5 days	Tue 6/14/11	Mon 6/20/11
211	Semi-Annual Event 2	30 days	Mon 10/3/11	Fri 11/11/11
212	Bi-Monthly Gauging	254 days	Mon 1/3/11	Fri 12/30/11
213	**Annual Report**	**25 days**	**Mon 11/14/11**	**Tue 12/20/11**
214	Draft	20 days	Mon 11/14/11	Tue 12/13/11
215	Final	5 days	Wed 12/14/11	Tue 12/20/11
216	Approved	0 days	Tue 12/20/11	Tue 12/20/11
217	**Year 4 (2012)**	**254 days**	**Tue 1/3/12**	**Mon 12/31/12**
218	LTO/LTM	254 days	Tue 1/3/12	Mon 12/31/12
219	Semi-Annual Event 1	40 days	Mon 4/16/12	Mon 6/11/12
220	Interim Report	5 days	Tue 6/12/12	Mon 6/18/12
221	Semi-Annual Event 2	30 days	Mon 10/1/12	Fri 11/9/12
222	Bi-Monthly Gauging	254 days	Tue 1/3/12	Mon 12/31/12
223	**Annual Report**	**25 days**	**Mon 11/12/12**	**Tue 12/18/12**
224	Draft	20 days	Mon 11/12/12	Tue 12/11/12
225	Final	5 days	Wed 12/12/12	Tue 12/18/12
226	Approved	0 days	Tue 12/18/12	Tue 12/18/12
227	**Year 5 (2013)**	**254 days**	**Wed 1/2/13**	**Tue 12/31/13**
228	LTO/LTM	254 days	Wed 1/2/13	Tue 12/31/13
229	Semi-Annual Event 1	40 days	Mon 4/15/13	Mon 6/10/13
230	Interim Report	8 days	Tue 6/11/13	Thu 6/20/13
231	Semi-Annual Event 2	30 days	Mon 9/30/13	Fri 11/8/13
232	Bi-Monthly Gauging	254 days	Wed 1/2/13	Tue 12/31/13
233	**Annual Report**	**25 days**	**Mon 11/11/13**	**Tue 12/17/13**



Project: FGGM 13 (Pesticide Shop) ar
Date: Wed 5/18/11

Task
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Rolled Up Progress
Split
External Tasks
Project Summary
Group By Summary
Deadline

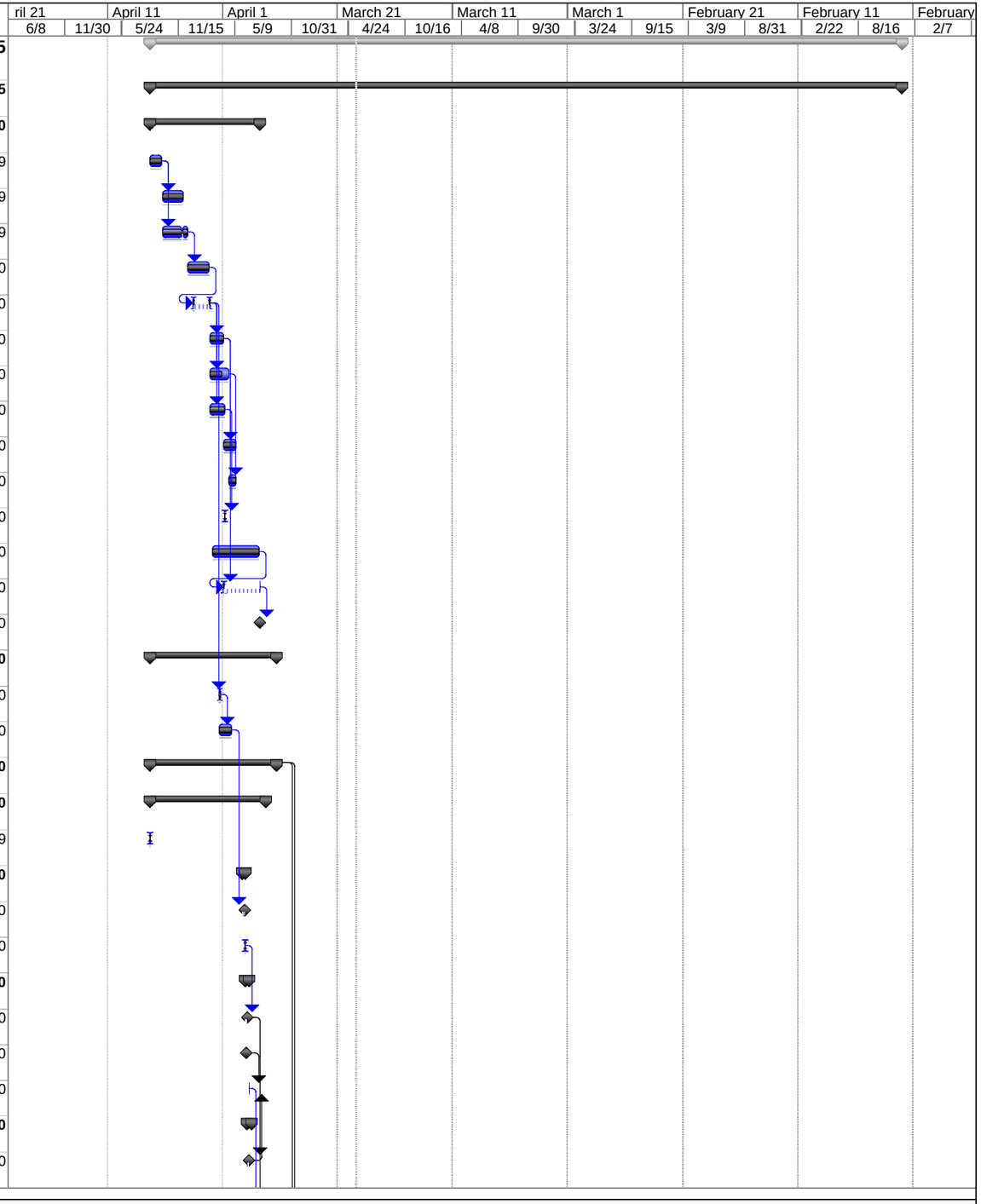
ID	Task Name	Duration	Start	Finish
234	Draft	20 days	Mon 11/11/13	Tue 12/10/13
235	Final	5 days	Wed 12/11/13	Tue 12/17/13
236	Approved	0 days	Tue 12/17/13	Tue 12/17/13
237	**Year 6 (2014)**	**254 days**	**Thu 1/2/14**	**Wed 12/31/14**
238	LTO/LTM	254 days	Thu 1/2/14	Wed 12/31/14
239	Semi-Annual Event 1	40 days	Mon 4/14/14	Mon 6/9/14
240	Interim Report	5 days	Tue 6/10/14	Mon 6/16/14
241	Semi-Annual Event 2	30 days	Mon 9/29/14	Fri 11/7/14
242	Bi-Monthly Gauging	254 days	Thu 1/2/14	Wed 12/31/14
243	**Annual Report**	**25 days**	**Mon 11/10/14**	**Tue 12/16/14**
244	Draft	20 days	Mon 11/10/14	Tue 12/9/14
245	Final	5 days	Wed 12/10/14	Tue 12/16/14
246	Approved	0 days	Tue 12/16/14	Tue 12/16/14
247	**Year 7 (2015)**	**254 days**	**Fri 1/2/15**	**Thu 12/31/15**
248	LTO/LTM	210 days	Fri 1/2/15	Tue 10/27/15
249	Semi-Annual Event 1	40 days	Mon 4/13/15	Mon 6/8/15
250	Interim Report	5 days	Tue 6/9/15	Mon 6/15/15
251	Semi-Annual Event 2	30 days	Mon 9/28/15	Fri 11/6/15
252	Bi-Monthly Gauging	253 days	Mon 1/5/15	Thu 12/31/15
253	**Annual Report**	**25 days**	**Mon 11/9/15**	**Tue 12/15/15**
254	Draft	20 days	Mon 11/9/15	Tue 12/8/15
255	Final	5 days	Wed 12/9/15	Tue 12/15/15
256	Approved	0 days	Tue 12/15/15	Tue 12/15/15
257	Phase End	0 days	Thu 12/31/15	Thu 12/31/15



Project: FGGM 13 (Pesticide Shop) ar
Date: Wed 5/18/11

Task
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Rolled Up Progress
Split
External Tasks
Project Summary
Group By Summary
Deadline

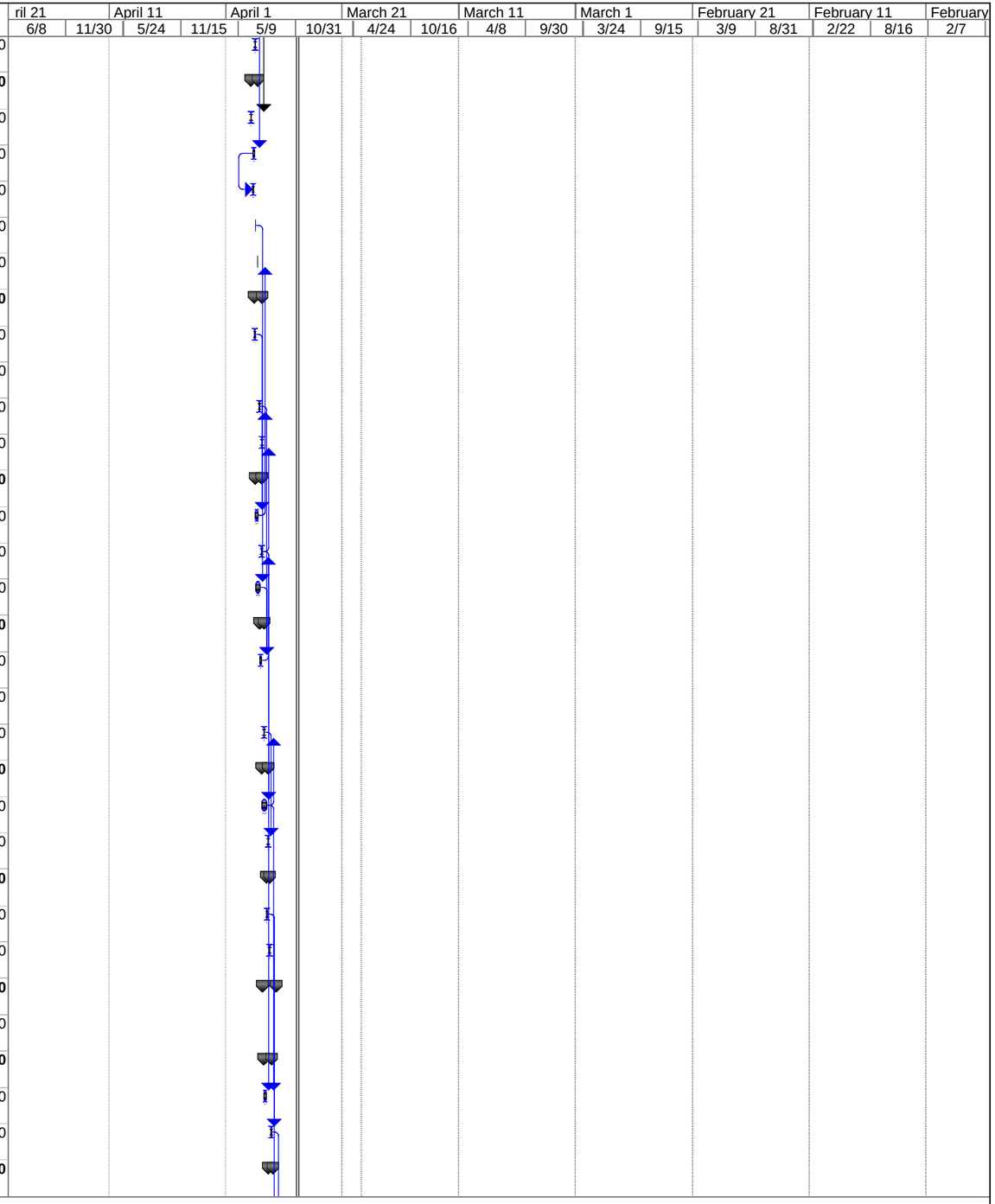
ID	Task Name	Duration	Start	Finish
0	**Ft. Meade PBA Schedule**	**1617 days?**	**Fri 8/21/09**	**Wed 12/30/15**
1	**OU-4 Remedial Investigation**	**1616 days?**	**Fri 8/21/09**	**Tue 12/29/15**
2	**Remedial Investigation Work Plan Addendum OU4**	**238.5 days**	**Fri 8/21/09**	**Mon 7/26/10**
3	Suppl Workplan	26 days	Fri 8/21/09	Fri 9/25/09
4	Supp GW Sampling	44 days	Tue 9/29/09	Tue 12/1/09
5	Draft	53 days	Tue 9/29/09	Tue 12/15/09
6	Army Review	47 days	Tue 12/15/09	Fri 2/19/10
7	Draft Final (RI WP Addendum)	2 days	Thu 12/31/09	Mon 2/22/10
8	MDE Review	30 days	Mon 2/22/10	Mon 4/5/10
9	EPA Review	42 days	Mon 2/22/10	Wed 4/21/10
10	AOC review	34 days	Mon 2/22/10	Fri 4/9/10
11	MDE RTCs	28 days	Mon 4/5/10	Thu 5/13/10
12	EPA RTCs	16 days	Wed 4/21/10	Thu 5/13/10
13	AOC RTCs	1 day	Fri 4/9/10	Fri 4/9/10
14	AOC ROE request	102 days	Tue 3/2/10	Fri 7/23/10
15	Final	2 days	Mon 4/5/10	Mon 7/26/10
16	Approved RIWP	0 days	Mon 7/26/10	Mon 7/26/10
17	**Remedial Investigation OU4**	**275 days?**	**Fri 8/21/09**	**Wed 9/15/10**
18	Mobilize	5 days	Mon 3/22/10	Fri 3/26/10
19	Field Work for OU-4 (Phase 1 - CPT and MIPs)	28 days	Tue 3/23/10	Thu 4/29/10
20	**Phase 1B - Rotosonic Drilling**	**275 days?**	**Fri 8/21/09**	**Wed 9/15/10**
21	**OU-4 and CSL Borings**	**253 days?**	**Fri 8/21/09**	**Fri 8/13/10**
22	Conduct On-Site Investigations	1 day?	Fri 8/21/09	Fri 8/21/09
23	**SB14**	**7.26 days**	**Wed 6/2/10**	**Fri 6/11/10**
24	Drill to depth - collect GW samples	0 days	Wed 6/2/10	Wed 6/9/10
25	Abandon borehole	1 day	Thu 6/10/10	Fri 6/11/10
26	**SB21**	**7.74 days**	**Fri 6/11/10**	**Tue 6/22/10**
27	Drill to depth - collect GW samples	0 days	Fri 6/11/10	Thu 6/17/10
28	Technical Call with regulators (1000)	0 days	Mon 6/14/10	Mon 6/14/10
29	Abandon Borehole	0.24 days	Tue 6/22/10	Tue 6/22/10
30	**SB31**	**10 days**	**Thu 6/17/10**	**Wed 6/30/10**
31	Drill to depth - collect GW samples	0 days	Thu 6/17/10	Tue 6/22/10



Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

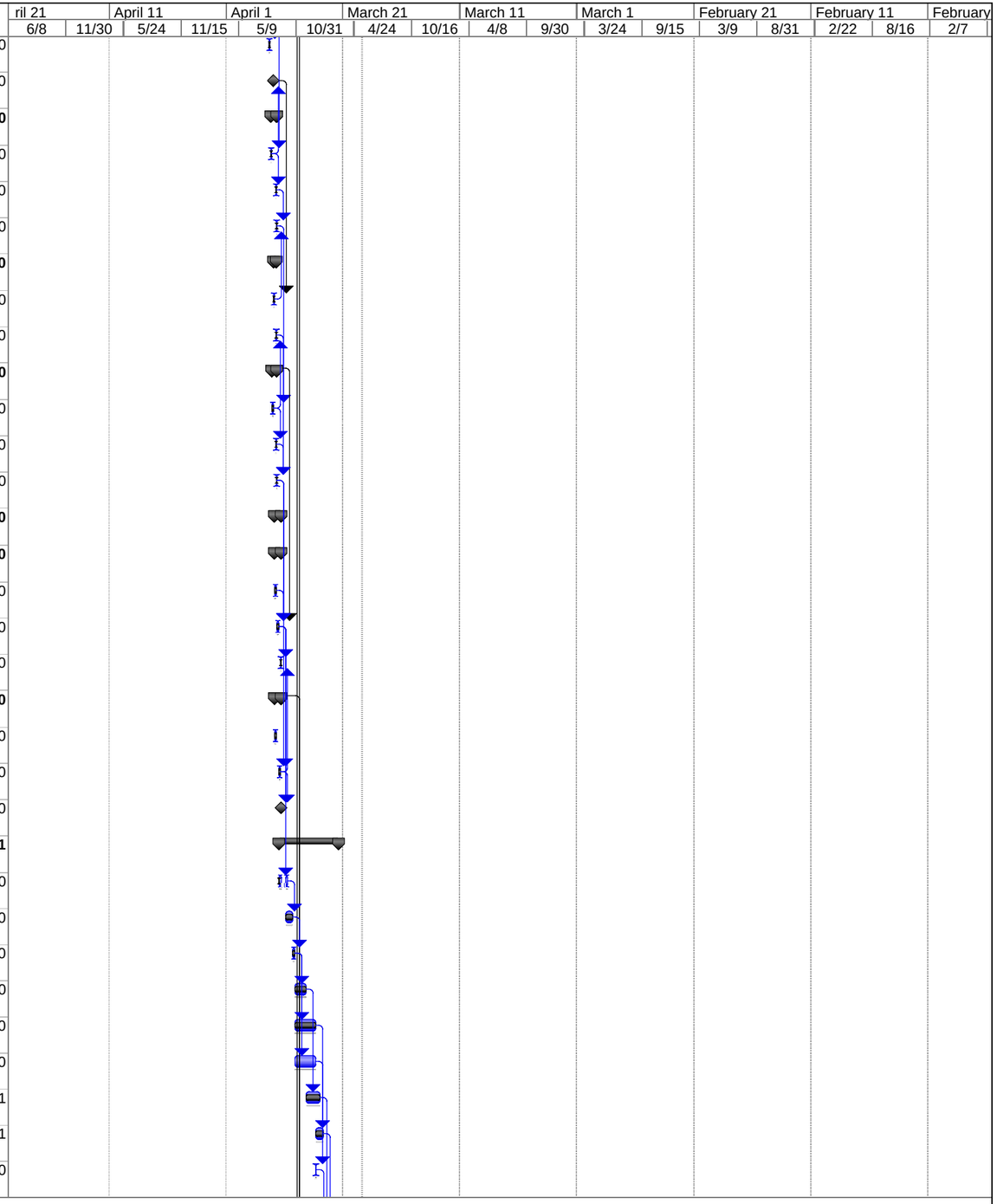
ID	Task Name	Duration	Start	Finish
32	Abandon Borehole	1 day	Wed 6/30/10	Wed 6/30/10
33	**SB30**	**14.74 days**	**Thu 6/17/10**	**Fri 7/9/10**
34	Coordinate traffic control	1 day	Thu 6/17/10	Fri 6/18/10
35	Implement traffic control	3 days	Wed 6/23/10	Mon 6/28/10
36	Drill to depth - collect GW samples	3 days	Wed 6/23/10	Fri 6/25/10
37	Technical Call with regulators (1400)	0.5 hrs	Fri 7/2/10	Fri 7/2/10
38	Construct MW	0.5 days	Fri 7/9/10	Fri 7/9/10
39	**SB38**	**17 days**	**Mon 6/28/10**	**Wed 7/21/10**
40	Drill to depth - collect GW samples	3 days	Mon 6/28/10	Wed 6/30/10
41	Technical Call with regulators (1500)	0 days	Fri 7/9/10	Fri 7/9/10
42	Drill to depth - collect GW samples	1.5 days	Tue 7/13/10	Wed 7/14/10
43	Construct MW	1 day	Wed 7/21/10	Wed 7/21/10
44	**SB32**	**13 days**	**Thu 7/1/10**	**Tue 7/20/10**
45	Drill to depth - collect GW samples	6 days	Thu 7/1/10	Fri 7/9/10
46	Construct MW	1 day	Tue 7/20/10	Tue 7/20/10
47	SB46 and SB47 utility clearance and UXO avoidance	8 days	Fri 7/2/10	Thu 7/15/10
48	**SB47**	**9.56 days**	**Wed 7/14/10**	**Wed 7/28/10**
49	Drill to depth - collect GW samples	3.5 days	Wed 7/14/10	Mon 7/19/10
50	Email to regulators	0 days	Mon 7/26/10	Mon 7/26/10
51	Abandon Borehole	1 day	Tue 7/27/10	Wed 7/28/10
52	**SB46**	**14 days**	**Wed 7/21/10**	**Mon 8/9/10**
53	Drill to depth - collect GW samples	11 days	Wed 7/21/10	Wed 8/4/10
54	Construct MW	1 day	Mon 8/9/10	Mon 8/9/10
55	**SB48**	**8 days**	**Wed 8/4/10**	**Fri 8/13/10**
56	Drill to depth - collect GW samples	3 days	Wed 8/4/10	Fri 8/6/10
57	Construct MW	1 day	Fri 8/13/10	Fri 8/13/10
58	**AOC Borings**	**30 days**	**Fri 7/23/10**	**Thu 9/2/10**
59	Confirm ROE agreement	0 days	Fri 7/23/10	Fri 7/23/10
60	**SB28**	**18 days**	**Tue 7/27/10**	**Thu 8/19/10**
61	Drill to depth - collect GW samples	6 days	Tue 7/27/10	Tue 8/3/10
62	Abandon Borehole/Construct MW	2 days	Wed 8/18/10	Thu 8/19/10
63	**SB25**	**10 days**	**Tue 8/10/10**	**Mon 8/23/10**



Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

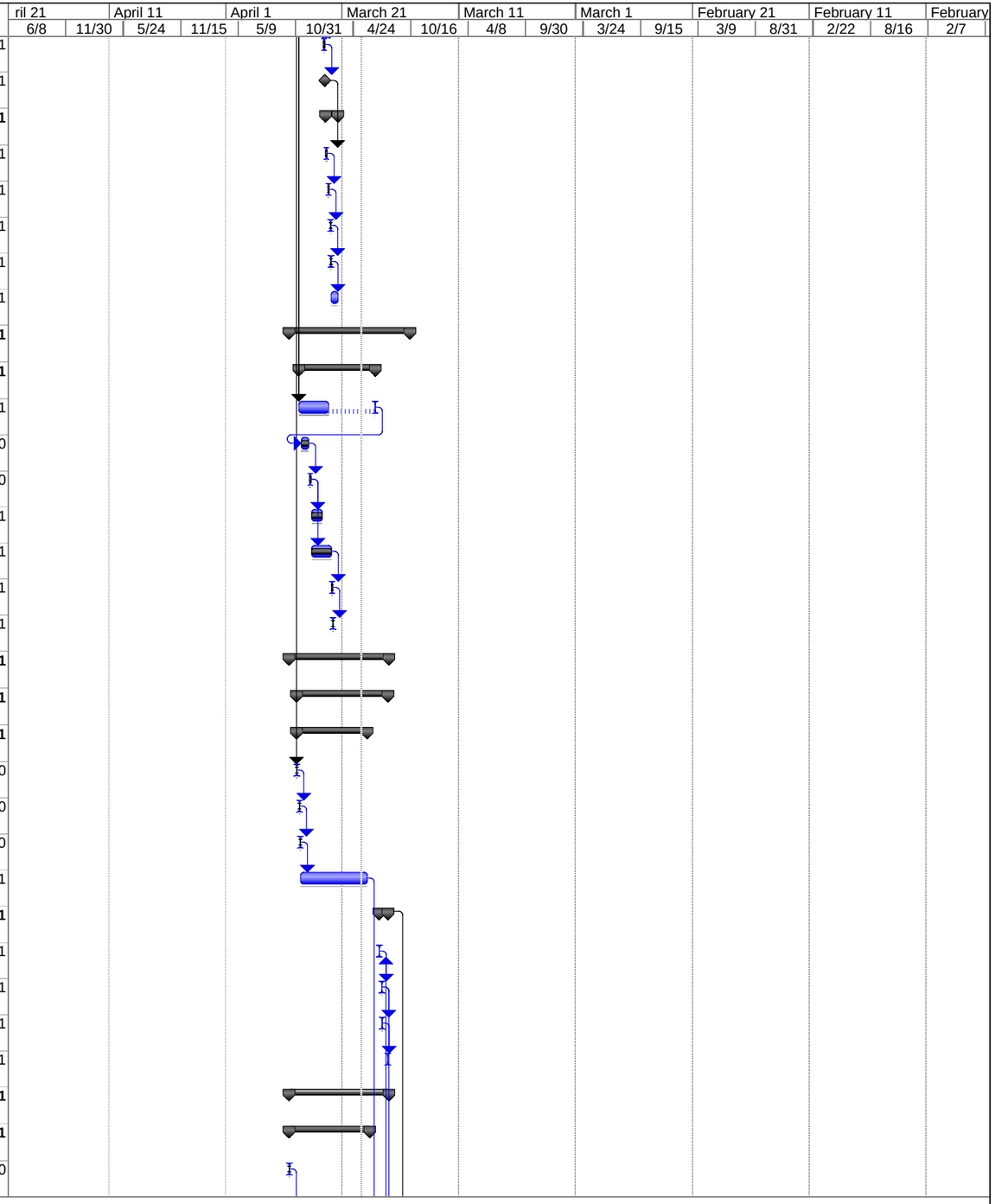
ID	Task Name	Duration	Start	Finish
64	Drill to depth - collect GW samples	3 days	Tue 8/10/10	Thu 8/12/10
65	Abandon Borehole/Construct MW	0 days	Mon 8/23/10	Mon 8/23/10
66	**SB26**	**14 days**	**Mon 8/16/10**	**Thu 9/2/10**
67	Drill to depth - collect GW samples	2 days	Mon 8/16/10	Tue 8/17/10
68	Acquire ROE Amendment	2 days	Tue 8/31/10	Wed 9/1/10
69	Abandon Borehole/Construct MW	1 day	Thu 9/2/10	Thu 9/2/10
70	**SB27**	**7 days**	**Tue 8/24/10**	**Wed 9/1/10**
71	Drill to depth - collect GW samples	3 days	Tue 8/24/10	Thu 8/26/10
72	Abandon Borehole/Construct MW	1 day	Wed 9/1/10	Wed 9/1/10
73	**SB15**	**11 days**	**Thu 8/19/10**	**Thu 9/2/10**
74	Drill to depth - collect GW samples	3 days	Thu 8/19/10	Mon 8/23/10
75	Acquire ROE Amendment	2 days	Tue 8/31/10	Wed 9/1/10
76	Construct MW	1 day	Thu 9/2/10	Thu 9/2/10
77	**OU-4 Borings SB50 and SB51**	**13 days**	**Fri 8/27/10**	**Wed 9/15/10**
78	**SB50**	**13 days**	**Fri 8/27/10**	**Wed 9/15/10**
79	Confirm dig permit	4 days	Fri 8/27/10	Wed 9/1/10
80	Drill to depth - collect GW samples	3 days	Fri 9/3/10	Wed 9/8/10
81	Abandon Borehole/Construct MW	2 days	Tue 9/14/10	Wed 9/15/10
82	**SB51**	**13 days**	**Fri 8/27/10**	**Wed 9/15/10**
83	Confirm dig permit	4 days	Fri 8/27/10	Wed 9/1/10
84	Drill to depth - collect GW samples	3 days	Thu 9/9/10	Mon 9/13/10
85	Abandon Borehole/Construct MW	0 days	Wed 9/15/10	Wed 9/15/10
86	**Vapor Intrusion Study**	**126 days**	**Thu 9/9/10**	**Wed 3/9/11**
87	VI Work Plan - Internal Draft	6.5 days	Thu 9/9/10	Tue 10/5/10
88	Army Review	15 days	Thu 9/30/10	Wed 10/20/10
89	VI Work Plan - Draft	5 days	Thu 10/21/10	Wed 10/27/10
90	MDE Review	22 days	Thu 10/28/10	Tue 11/30/10
91	EPA Review	42 days	Thu 10/28/10	Wed 12/29/10
92	AOC review	42 days	Thu 10/28/10	Wed 12/29/10
93	MDE RTCs	28 days	Wed 12/1/10	Tue 1/11/11
94	EPA RTCs	16 days	Thu 12/30/10	Fri 1/21/11
95	AOC RTCs	1 day	Thu 12/30/10	Thu 12/30/10



Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

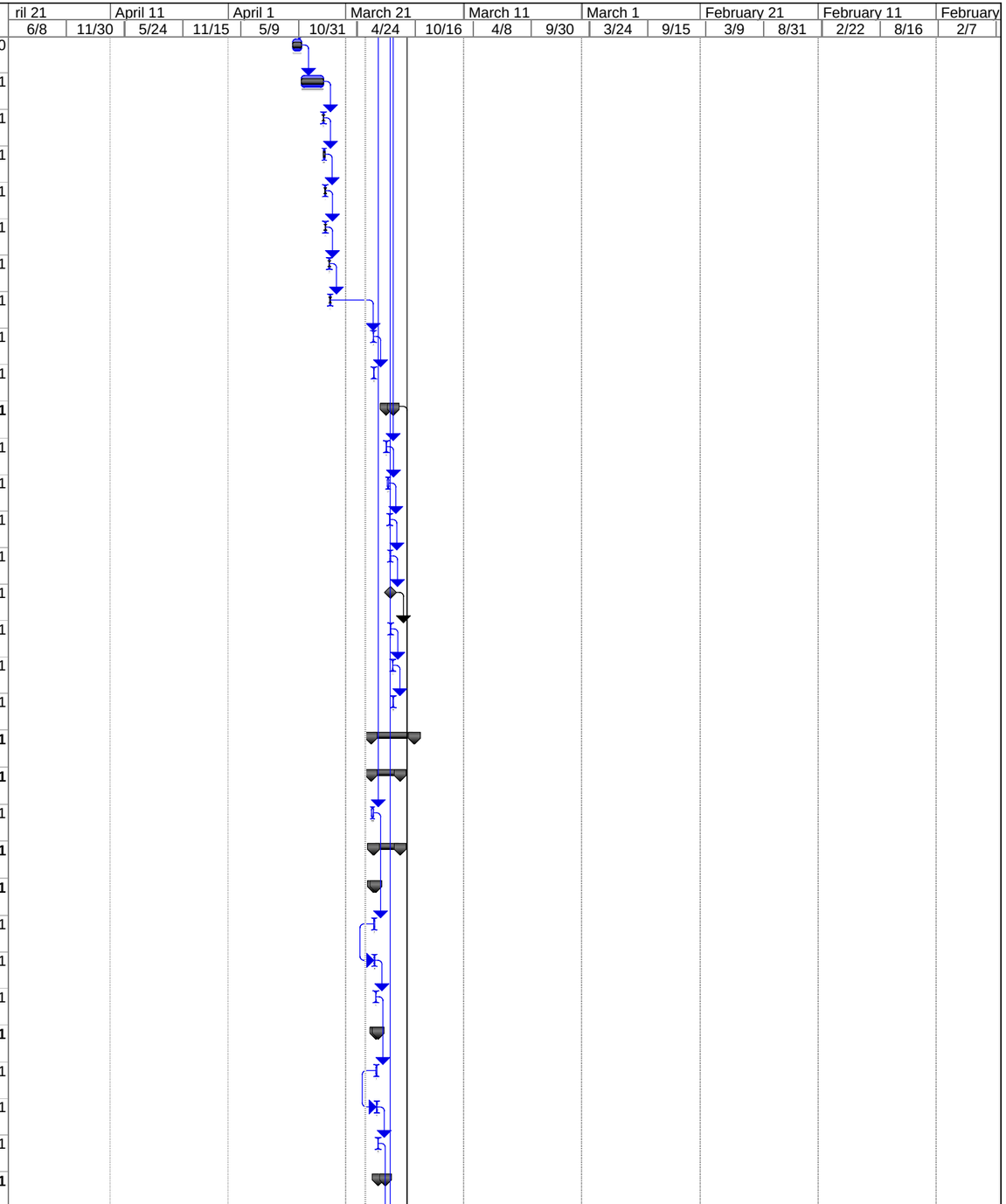
ID	Task Name	Duration	Start	Finish
96	VI Work Plan - Final	5 days	Mon 1/24/11	Fri 1/28/11
97	Approved VIWP	0 days	Fri 1/28/11	Fri 1/28/11
98	**VI Field Work**	**28 days**	**Mon 1/31/11**	**Wed 3/9/11**
99	Mobilization	5 days	Mon 1/31/11	Fri 2/4/11
100	Building surveys	4 days	Mon 2/7/11	Thu 2/10/11
101	Place Cannisters	1 day	Tue 2/15/11	Tue 2/15/11
102	Retrieve Caninsters	1 day	Wed 2/16/11	Wed 2/16/11
103	Lab analysis	15 days	Thu 2/17/11	Wed 3/9/11
104	**Off Site LPA Investigations 125d and 126d (Phase 2)**	**257 days**	**Tue 10/12/10**	**Fri 10/14/11**
105	**Source Identification Workplan**	**162 days**	**Thu 11/11/10**	**Fri 7/1/11**
106	Draft Workplan (based on OU4 field data)	60.25 days	Thu 11/11/10	Fri 7/1/11
107	Army Review	15 days	Thu 11/18/10	Fri 12/10/10
108	Draft Final Workplan	5 days	Mon 12/13/10	Fri 12/17/10
109	MDE Review	22 days	Mon 12/20/10	Thu 1/20/11
110	EPA Review	42 days	Mon 12/20/10	Thu 2/17/11
111	Final	2 days	Fri 2/18/11	Mon 2/21/11
112	Approved Workplan	1 day	Tue 2/22/11	Tue 2/22/11
113	**Source ID Fieldwork LPA**	**212 days**	**Tue 10/12/10**	**Thu 8/11/11**
114	**County ROW permits**	**192 days**	**Thu 11/4/10**	**Mon 8/8/11**
115	**ROW Permits for LPA-MW05, -MW22 and -MW23**	**148 days**	**Thu 11/4/10**	**Mon 6/6/11**
116	Submit to AA County	1 day	Thu 11/4/10	Thu 11/4/10
117	Receive AA County signature	1 day	Fri 11/12/10	Fri 11/12/10
118	Submit to Army	1 day	Mon 11/15/10	Mon 11/15/10
119	Receive Army signature	140 days	Tue 11/16/10	Mon 6/6/11
120	**ROW Permits for LPA-MW?? And -MW??**	**19 days**	**Wed 7/13/11**	**Mon 8/8/11**
121	Submit to AA County	1 day	Wed 7/13/11	Wed 7/13/11
122	Receive AA County signature	1 day	Thu 7/21/11	Thu 7/21/11
123	Submit to Army	1 day	Fri 7/22/11	Fri 7/22/11
124	Receive Army signature	1 day	Mon 8/8/11	Mon 8/8/11
125	**Public Notification**	**212 days**	**Tue 10/12/10**	**Thu 8/11/11**
126	**Odenton/LPA Drilling Fact Sheet #1 (LPA-MW05, -MW22 and -MW23)**	**171 days**	**Tue 10/12/10**	**Tue 6/14/11**
127	Submit fact sheet and timeline to Army	1 day	Tue 10/12/10	Tue 10/12/10



Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

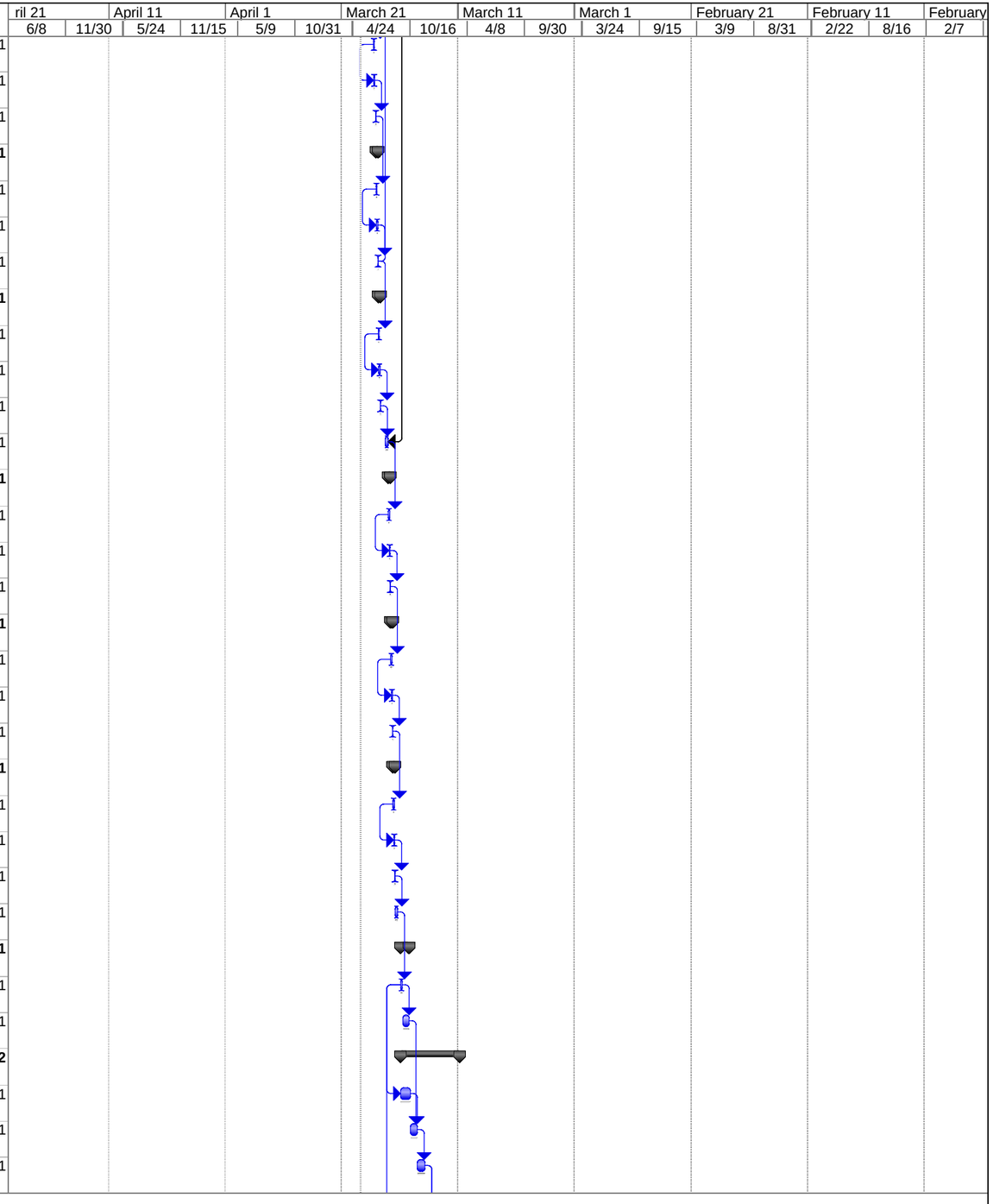
ID	Task Name	Duration	Start	Finish
128	Army review and comment	19 days	Wed 10/13/10	Mon 11/8/10
129	ARCADIS revisions	45 days	Mon 11/8/10	Thu 1/13/11
130	Army review and comment	1 day	Thu 1/13/11	Thu 1/13/11
131	ARCADIS revisions	4 days	Thu 1/13/11	Tue 1/18/11
132	Army review and comment	2 days	Tue 1/18/11	Wed 1/19/11
133	ARCADIS revisions	1 day	Wed 1/19/11	Wed 1/19/11
134	Provide fact sheet to EPA/MDE/AACo DoH	1 day	Mon 1/31/11	Mon 1/31/11
135	EPA/MDE acceptance of fact sheet	2 days	Wed 2/2/11	Thu 2/3/11
136	Produce fact sheet	1 day	Mon 6/13/11	Mon 6/13/11
137	Distribute fact sheet door to door to residents within 1 block of drilling sites	1 day	Tue 6/14/11	Tue 6/14/11
138	**Odenton/LPA Drilling Fact Sheet #2 (LPA-MW04 and -MW06)**	**15 days**	**Fri 7/22/11**	**Thu 8/11/11**
139	Submit fact sheet to Army	1 day	Fri 7/22/11	Fri 7/22/11
140	Army review and comment	5 days	Mon 7/25/11	Fri 7/29/11
141	ARCADIS revisions	1 day	Mon 8/1/11	Mon 8/1/11
142	Army review	2 days	Tue 8/2/11	Wed 8/3/11
143	Army approval	0 days	Wed 8/3/11	Wed 8/3/11
144	Provide fact sheet to EPA/MDE/AACo DoH	1 day	Thu 8/4/11	Thu 8/4/11
145	Produce fact sheet	1 day	Wed 8/10/11	Wed 8/10/11
146	Distribute fact sheet door to door to residents within 1 block of drilling sites	1 day	Thu 8/11/11	Thu 8/11/11
147	**Mobilize**	**92 days**	**Tue 6/7/11**	**Fri 10/14/11**
148	**Fieldwork for 125d and 126d source identification (Phase 2)**	**62 days**	**Tue 6/7/11**	**Thu 9/1/11**
149	Mobilize	5 days	Tue 6/7/11	Mon 6/13/11
150	**LPA Wells - Rotosonic Boring**	**57 days**	**Tue 6/14/11**	**Thu 9/1/11**
151	**SB-52**	**5 days**	**Tue 6/14/11**	**Mon 6/20/11**
152	Drilling and Sampling	3 days	Tue 6/14/11	Thu 6/16/11
153	Laboratory Analysis	3 days	Wed 6/15/11	Fri 6/17/11
154	Monitoring Well Construction	1 day	Mon 6/20/11	Mon 6/20/11
155	**SB-53**	**5 days**	**Tue 6/21/11**	**Mon 6/27/11**
156	Drilling and Sampling	3 days	Tue 6/21/11	Thu 6/23/11
157	Laboratory Analysis	3 days	Wed 6/22/11	Fri 6/24/11
158	Monitoring Well Construction	1 day	Mon 6/27/11	Mon 6/27/11
159	**LPA-MW No. 1**	**15 days**	**Tue 6/28/11**	**Tue 7/19/11**



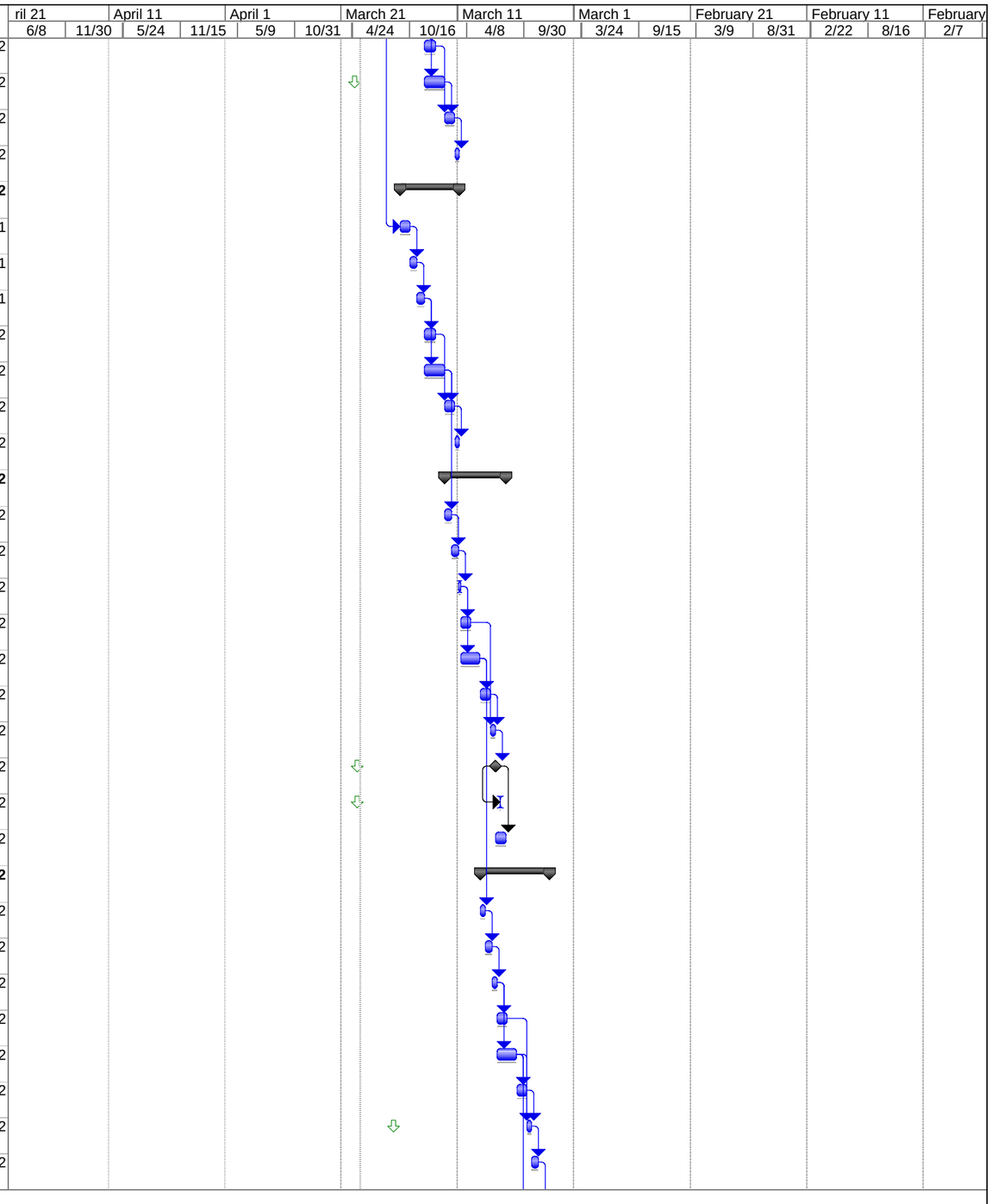
Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

ID	Task Name	Duration	Start	Finish
160	Drilling and Sampling	3 days	Tue 6/28/11	Thu 6/30/11
161	Laboratory Analysis	3 days	Wed 6/29/11	Fri 7/1/11
162	Monitoring Well Construction	1 day	Tue 7/5/11	Tue 7/5/11
163	**LPA-MW No. 2**	**5 days**	**Wed 7/6/11**	**Tue 7/12/11**
164	Drilling and Sampling	3 days	Wed 7/6/11	Fri 7/8/11
165	Laboratory Analysis	3 days	Thu 7/7/11	Mon 7/11/11
166	Monitoring Well Construction	1 day	Tue 7/12/11	Tue 7/12/11
167	**LPA-MW No. 3**	**5 days**	**Wed 7/13/11**	**Tue 7/19/11**
168	Drilling and Sampling	3 days	Wed 7/13/11	Fri 7/15/11
169	Laboratory Analysis	3 days	Thu 7/14/11	Mon 7/18/11
170	Monitoring Well Construction	1 day	Tue 7/19/11	Tue 7/19/11
171	Planning and Permitting Hiatus	7 days	Wed 8/3/11	Thu 8/11/11
172	**LPA-MW No. 4**	**5 days**	**Fri 8/12/11**	**Thu 8/18/11**
173	Drilling and Sampling	3 days	Fri 8/12/11	Tue 8/16/11
174	Laboratory Analysis	3 days	Mon 8/15/11	Wed 8/17/11
175	Monitoring Well Construction	1 day	Thu 8/18/11	Thu 8/18/11
176	**LPA-MW No. 5**	**5 days**	**Fri 8/19/11**	**Thu 8/25/11**
177	Drilling and Sampling	3 days	Fri 8/19/11	Tue 8/23/11
178	Laboratory Analysis	3 days	Mon 8/22/11	Wed 8/24/11
179	Monitoring Well Construction	1 day	Thu 8/25/11	Thu 8/25/11
180	**LPA-MW No. 6**	**5 days**	**Fri 8/26/11**	**Thu 9/1/11**
181	Drilling and Sampling	3 days	Fri 8/26/11	Tue 8/30/11
182	Laboratory Analysis	3 days	Mon 8/29/11	Wed 8/31/11
183	Monitoring Well Construction	1 day	Thu 9/1/11	Thu 9/1/11
184	Demobilization	5 days	Fri 9/2/11	Fri 9/9/11
185	**Groundwater Sampling & Lab Analysis**	**20 days**	**Mon 9/19/11**	**Fri 10/14/11**
186	Field Work	5 days	Mon 9/19/11	Fri 9/23/11
187	Laboratory Analysis	15 days	Mon 9/26/11	Fri 10/14/11
188	**Source Identification Report 125d and 126d**	**126 days**	**Mon 9/19/11**	**Fri 3/16/12**
189	Prepare Draft	22 days	Mon 9/19/11	Tue 10/18/11
190	Army Review	15 days	Wed 10/19/11	Tue 11/8/11
191	Prepare Draft Final	15 days	Wed 11/9/11	Thu 12/1/11



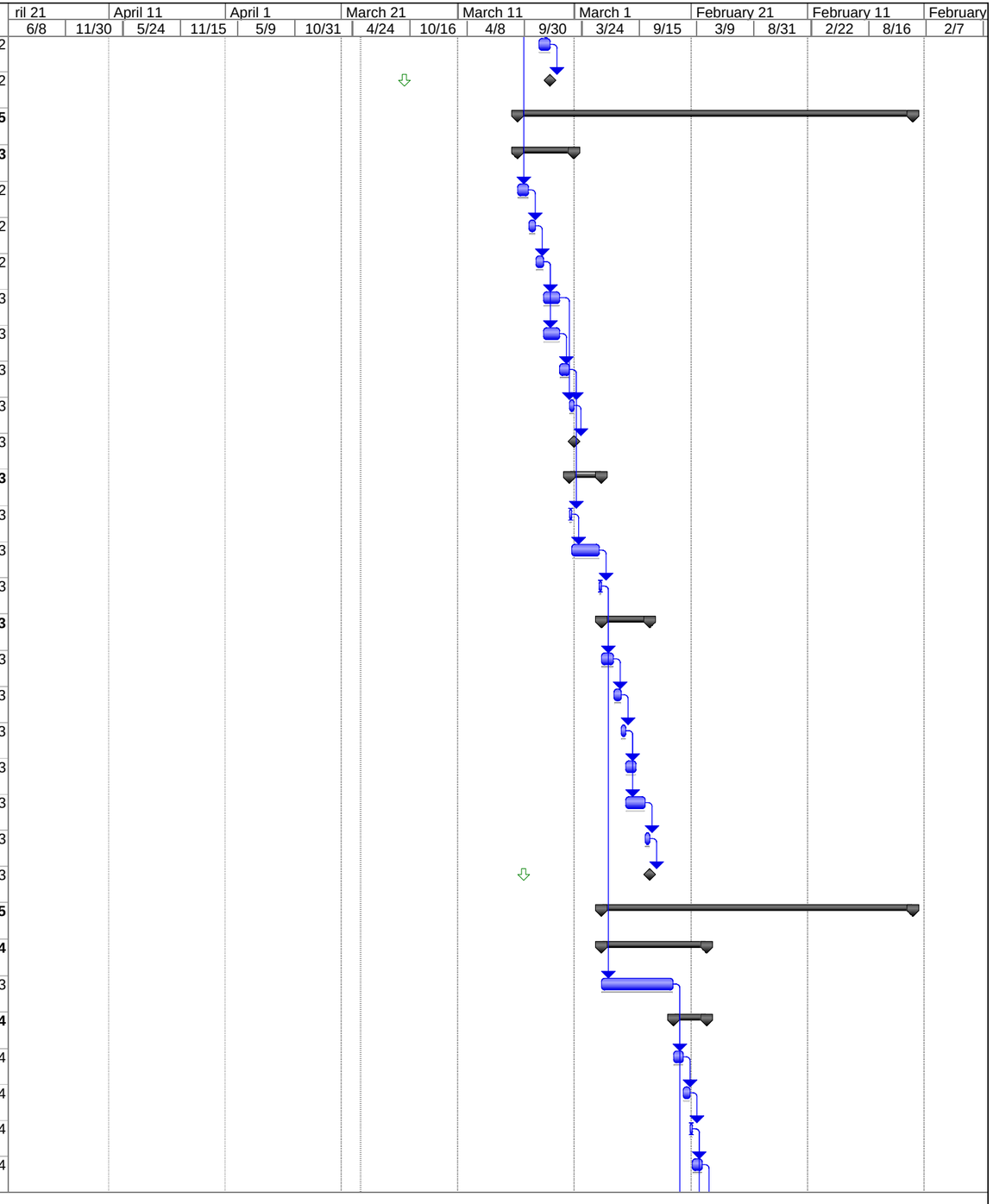
ID	Task Name	Duration	Start	Finish
192	MDE Review	22 days	Fri 12/2/11	Wed 1/4/12
193	EPA Review	42 days	Fri 12/2/11	Wed 2/1/12
194	Comment Resolution	22 days	Thu 2/2/12	Fri 3/2/12
195	Approved Source Identification Report	10 days	Mon 3/5/12	Fri 3/16/12
196	**Remedial Investigation/Feasibility Study**	**126 days**	**Mon 9/19/11**	**Fri 3/16/12**
197	Final addressing previous EPA/MDE Comments	22 days	Mon 9/19/11	Tue 10/18/11
198	Army Review	15 days	Wed 10/19/11	Tue 11/8/11
199	Draft Final	15 days	Wed 11/9/11	Thu 12/1/11
200	MDE Review	22 days	Fri 12/2/11	Wed 1/4/12
201	EPA Review	42 days	Fri 12/2/11	Wed 2/1/12
202	Comment Resolution (Final)	22 days	Thu 2/2/12	Fri 3/2/12
203	Approved RI/FS	10 days	Mon 3/5/12	Fri 3/16/12
204	**Proposed Plan**	**131 days**	**Thu 2/2/12**	**Mon 8/6/12**
205	Draft	15 days	Thu 2/2/12	Wed 2/22/12
206	Army Review	15 days	Thu 2/23/12	Wed 3/14/12
207	Draft Final	5 days	Thu 3/15/12	Wed 3/21/12
208	MDE Review	22 days	Thu 3/22/12	Fri 4/20/12
209	EPA Review	42 days	Thu 3/22/12	Fri 5/18/12
210	Comment Resolution	22 days	Mon 5/21/12	Wed 6/20/12
211	Prepare Final	10 days	Thu 6/21/12	Thu 7/5/12
212	Approved Proposed Plan	0 days	Thu 7/5/12	Thu 7/5/12
213	Public Meeting	1 day	Fri 7/20/12	Fri 7/20/12
214	Public Comment Period	22 days	Fri 7/6/12	Mon 8/6/12
215	**Decision Document**	**146 days**	**Mon 5/21/12**	**Mon 12/17/12**
216	Draft	10 days	Mon 5/21/12	Mon 6/4/12
217	Army Review	15 days	Tue 6/5/12	Mon 6/25/12
218	Draft Final	10 days	Tue 6/26/12	Tue 7/10/12
219	MDE Review	22 days	Wed 7/11/12	Thu 8/9/12
220	EPA Review	42 days	Wed 7/11/12	Fri 9/7/12
221	Comment Resolution	22 days	Mon 9/10/12	Tue 10/9/12
222	Final	10 days	Wed 10/10/12	Tue 10/23/12
223	Army Signature	15 days	Wed 10/24/12	Tue 11/13/12



Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

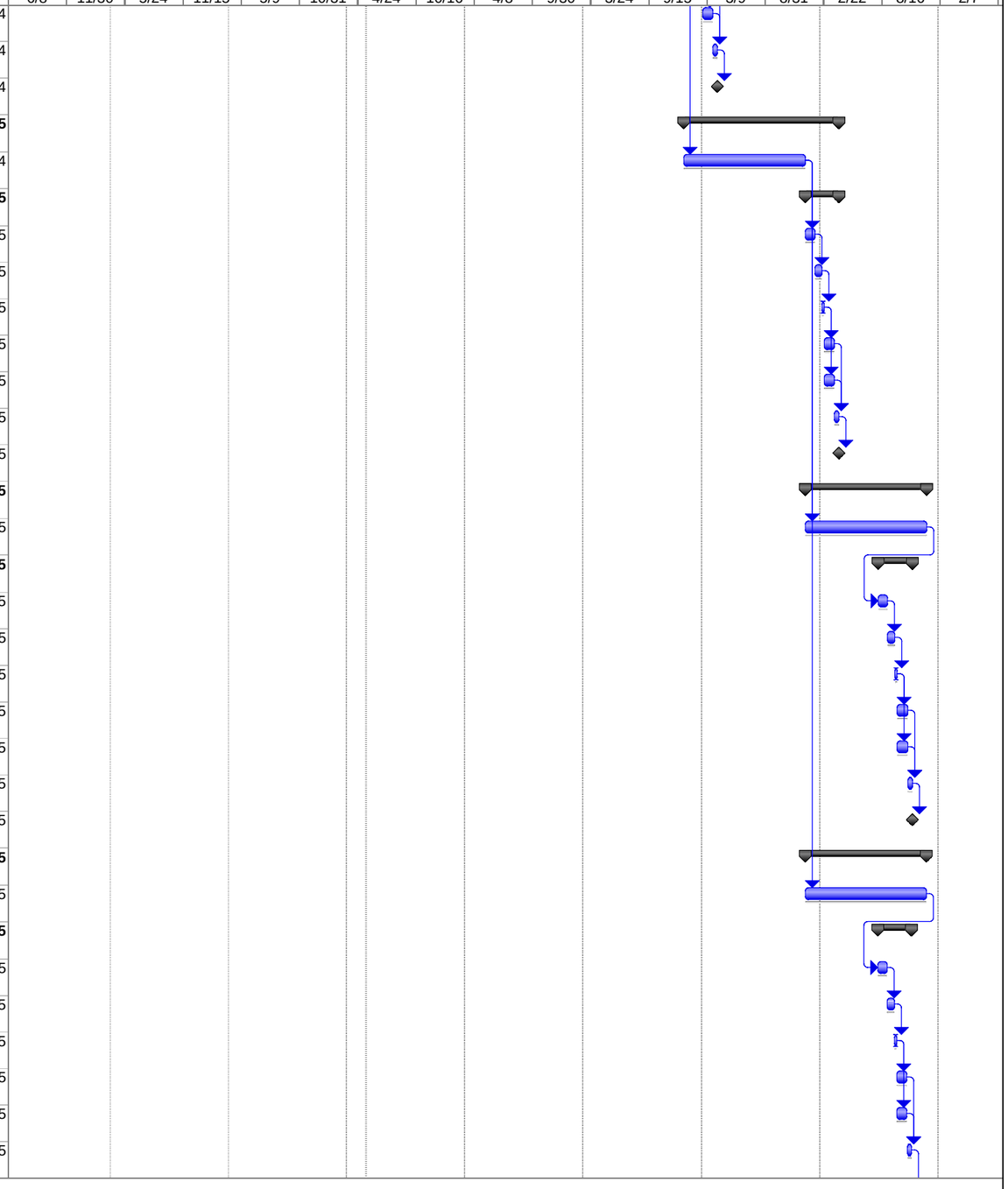
ID	Task Name	Duration	Start	Finish
224	EPA Legal and Signature	22 days	Wed 11/14/12	Mon 12/17/12
225	Signed DD	0 days	Mon 12/17/12	Mon 12/17/12
226	**RIP OU-4/LPA (Option)**	**838 days**	**Mon 9/10/12**	**Tue 12/29/15**
227	**Remedial Design**	**120 days**	**Mon 9/10/12**	**Thu 2/28/13**
228	Draft	25 days	Mon 9/10/12	Fri 10/12/12
229	Army Review	15 days	Mon 10/15/12	Fri 11/2/12
230	Draft Final	15 days	Mon 11/5/12	Tue 11/27/12
231	MDE Review	33 days	Wed 11/28/12	Tue 1/15/13
232	EPA Review	33 days	Wed 11/28/12	Tue 1/15/13
233	Comment resolution	22 days	Wed 1/16/13	Thu 2/14/13
234	Final	10 days	Fri 2/15/13	Thu 2/28/13
235	Approved RD	0 days	Thu 2/28/13	Thu 2/28/13
236	**Remedial Action**	**70 days**	**Fri 2/15/13**	**Thu 5/23/13**
237	Mobilization	5 days	Fri 2/15/13	Thu 2/21/13
238	Implement RA	60 days	Fri 2/22/13	Thu 5/16/13
239	Demobilization	5 days	Fri 5/17/13	Thu 5/23/13
240	**Interim Remedial Action Report**	**102 days**	**Fri 5/24/13**	**Thu 10/17/13**
241	Draft	25 days	Fri 5/24/13	Fri 6/28/13
242	Army Review	15 days	Mon 7/1/13	Mon 7/22/13
243	Draft Final	10 days	Tue 7/23/13	Mon 8/5/13
244	MDE Review	22 days	Tue 8/6/13	Thu 9/5/13
245	EPA Review	42 days	Tue 8/6/13	Thu 10/3/13
246	Final	10 days	Fri 10/4/13	Thu 10/17/13
247	Approved IRAR (RIP for OU-4GW and RIP LPA/125d/126d)	0 days	Thu 10/17/13	Thu 10/17/13
248	**LTO/LTM**	**658 days**	**Fri 5/24/13**	**Tue 12/29/15**
249	**Year 1 (2013)**	**222 days**	**Fri 5/24/13**	**Wed 4/9/14**
250	LTO/LTM	150 days	Fri 5/24/13	Fri 12/27/13
251	**Annual Report**	**72 days**	**Mon 12/30/13**	**Wed 4/9/14**
252	Draft	20 days	Mon 12/30/13	Mon 1/27/14
253	Army Review	15 days	Tue 1/28/14	Mon 2/17/14
254	Draft Final	5 days	Tue 2/18/14	Mon 2/24/14
255	MDE Review	22 days	Tue 2/25/14	Wed 3/26/14



Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

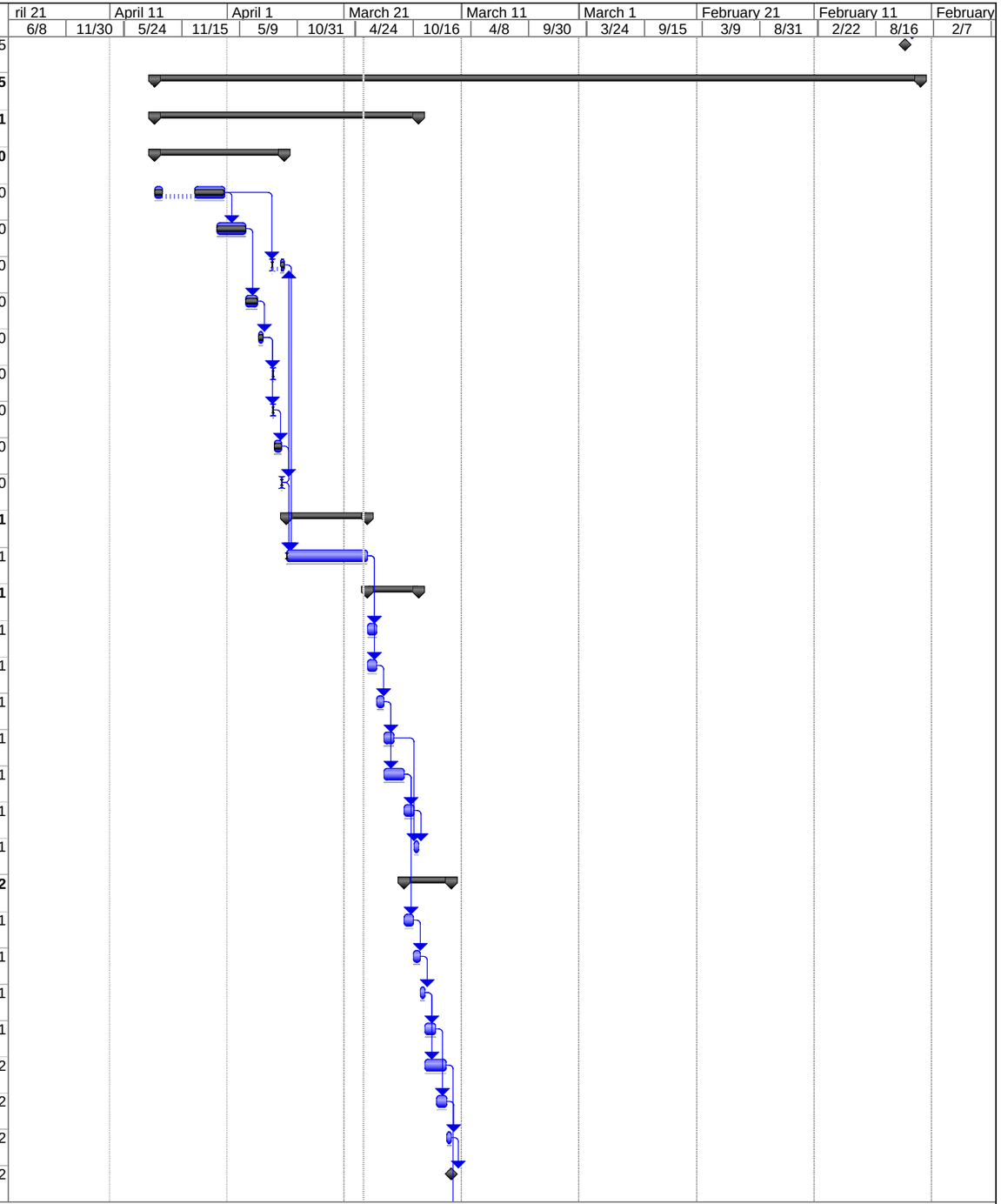
ID	Task Name	Duration	Start	Finish
256	EPA Review	22 days	Tue 2/25/14	Wed 3/26/14
257	Final	10 days	Thu 3/27/14	Wed 4/9/14
258	Approved	0 days	Wed 4/9/14	Wed 4/9/14
259	**Year 2 (2014)**	**326 days**	**Mon 12/30/13**	**Thu 4/9/15**
260	LTO/LTM	254 days	Mon 12/30/13	Mon 12/29/14
261	**Annual Report**	**72 days**	**Tue 12/30/14**	**Thu 4/9/15**
262	Draft	20 days	Tue 12/30/14	Tue 1/27/15
263	Army Review	15 days	Wed 1/28/15	Tue 2/17/15
264	Draft Final	5 days	Wed 2/18/15	Tue 2/24/15
265	MDE Review	22 days	Wed 2/25/15	Thu 3/26/15
266	EPA Review	22 days	Wed 2/25/15	Thu 3/26/15
267	Final	10 days	Fri 3/27/15	Thu 4/9/15
268	Approved	0 days	Thu 4/9/15	Thu 4/9/15
269	**Year 3 (2015)**	**254 days**	**Tue 12/30/14**	**Tue 12/29/15**
270	LTO/LTM	254 days	Tue 12/30/14	Tue 12/29/15
271	**Annual Report**	**72 days**	**Thu 8/6/15**	**Mon 11/16/15**
272	Draft	20 days	Thu 8/6/15	Wed 9/2/15
273	Army Review	15 days	Thu 9/3/15	Thu 9/24/15
274	Draft Final	5 days	Fri 9/25/15	Thu 10/1/15
275	MDE Review	22 days	Fri 10/2/15	Mon 11/2/15
276	EPA Review	22 days	Fri 10/2/15	Mon 11/2/15
277	Final	10 days	Tue 11/3/15	Mon 11/16/15
278	Approved	0 days	Mon 11/16/15	Mon 11/16/15
279	**Year 4 (2015)**	**253 days**	**Tue 12/30/14**	**Mon 12/28/15**
280	LTO/LTM	253 days	Tue 12/30/14	Mon 12/28/15
281	**Annual Report**	**72 days**	**Wed 8/5/15**	**Fri 11/13/15**
282	Draft	20 days	Wed 8/5/15	Tue 9/1/15
283	Army Review	15 days	Wed 9/2/15	Wed 9/23/15
284	Draft Final	5 days	Thu 9/24/15	Wed 9/30/15
285	MDE Review	22 days	Thu 10/1/15	Fri 10/30/15
286	EPA Review	22 days	Thu 10/1/15	Fri 10/30/15
287	Final	10 days	Mon 11/2/15	Fri 11/13/15



Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

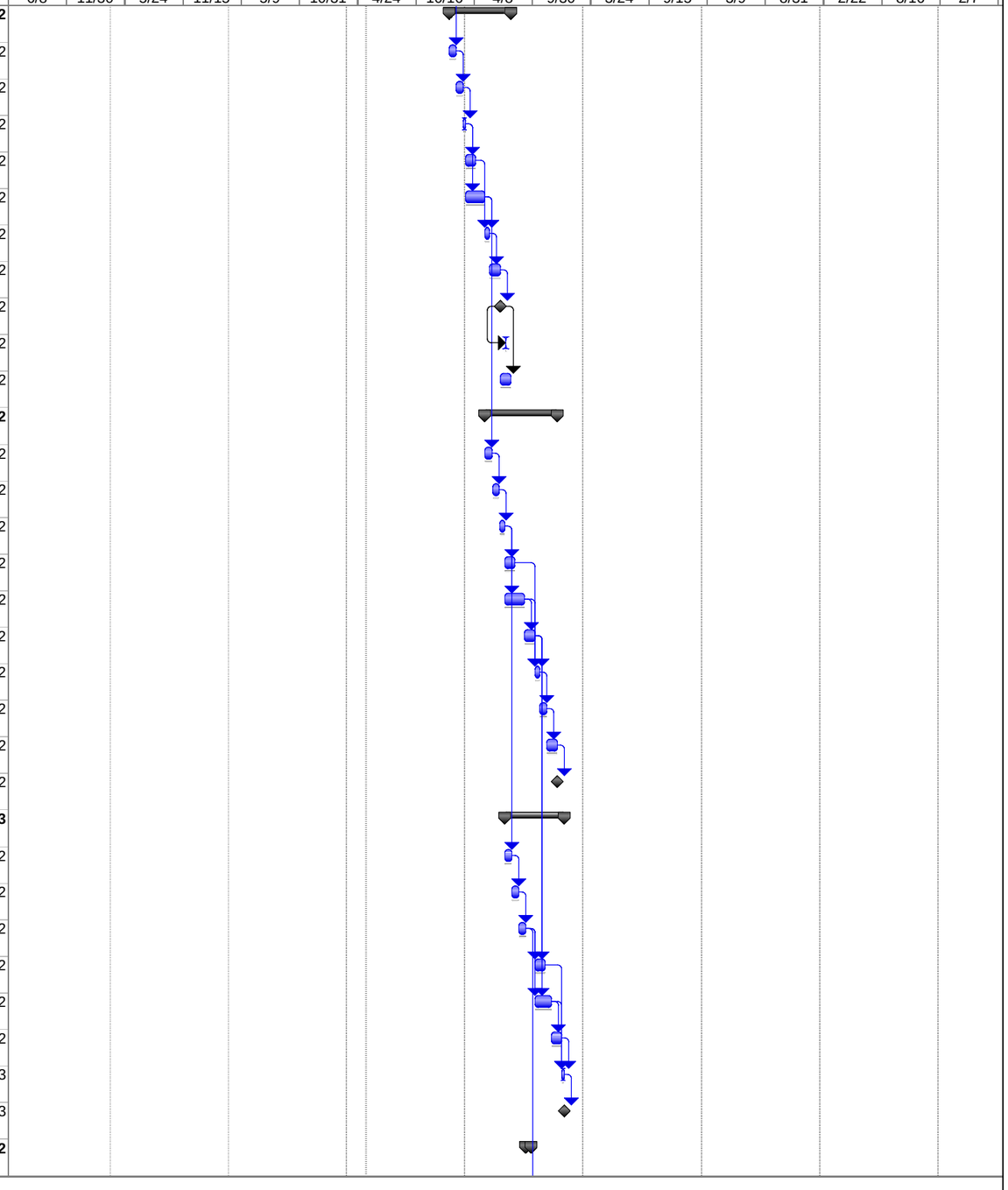
ID	Task Name	Duration	Start	Finish
288	Approved	0 days	Fri 11/13/15	Fri 11/13/15
289	**FGGM-74 - Architect of the Capitol**	**1614 days**	**Wed 8/26/09**	**Wed 12/30/15**
290	**Remedial Investigation**	**560 days**	**Wed 8/26/09**	**Wed 11/2/11**
291	**Workplan**	**276.24 days**	**Wed 8/26/09**	**Wed 9/22/10**
292	RI WP Draft--Determine arsenic issues	76.7 days	Wed 8/26/09	Fri 3/26/10
293	RI WP for lead hotspots - Internal Draft	63 days	Tue 3/2/10	Fri 5/28/10
294	ROE (Negotiate Access)	10 days	Mon 8/16/10	Wed 9/22/10
295	Army Review	24.46 days	Fri 5/28/10	Fri 7/2/10
296	RI WP Draft	10 days	Tue 7/6/10	Mon 7/19/10
297	MDE review	3 days	Wed 8/18/10	Fri 8/20/10
298	EPA review	3 days	Wed 8/18/10	Fri 8/20/10
299	Comment Resolution	15 days	Mon 8/23/10	Mon 9/13/10
300	Final Work Plan	1 day	Tue 9/14/10	Tue 9/14/10
301	**RI Fieldwork**	**170 days**	**Wed 9/29/10**	**Tue 5/31/11**
302	RI Field Work	170 days	Wed 9/29/10	Tue 5/31/11
303	**RI Report**	**109 days**	**Wed 6/1/11**	**Wed 11/2/11**
304	RI Risk Review	20 days	Wed 6/1/11	Tue 6/28/11
305	Draft-Final RI	20 days	Wed 6/1/11	Tue 6/28/11
306	Army Review	15 days	Wed 6/29/11	Wed 7/20/11
307	MDE Review	22 days	Thu 7/21/11	Fri 8/19/11
308	EPA Review	42 days	Thu 7/21/11	Mon 9/19/11
309	Comment Resolution	22 days	Tue 9/20/11	Wed 10/19/11
310	Approved RI	10 days	Thu 10/20/11	Wed 11/2/11
311	**Feasibility Study**	**99 days**	**Tue 9/20/11**	**Thu 2/9/12**
312	Draft	20 days	Tue 9/20/11	Mon 10/17/11
313	Army Review	15 days	Tue 10/18/11	Mon 11/7/11
314	Draft Final	10 days	Tue 11/8/11	Mon 11/21/11
315	MDE Review	22 days	Tue 11/22/11	Fri 12/23/11
316	EPA Review	42 days	Tue 11/22/11	Tue 1/24/12
317	Comment Resolution	22 days	Tue 12/27/11	Thu 1/26/12
318	Final	10 days	Fri 1/27/12	Thu 2/9/12
319	Approved FS	0 days	Thu 2/9/12	Thu 2/9/12



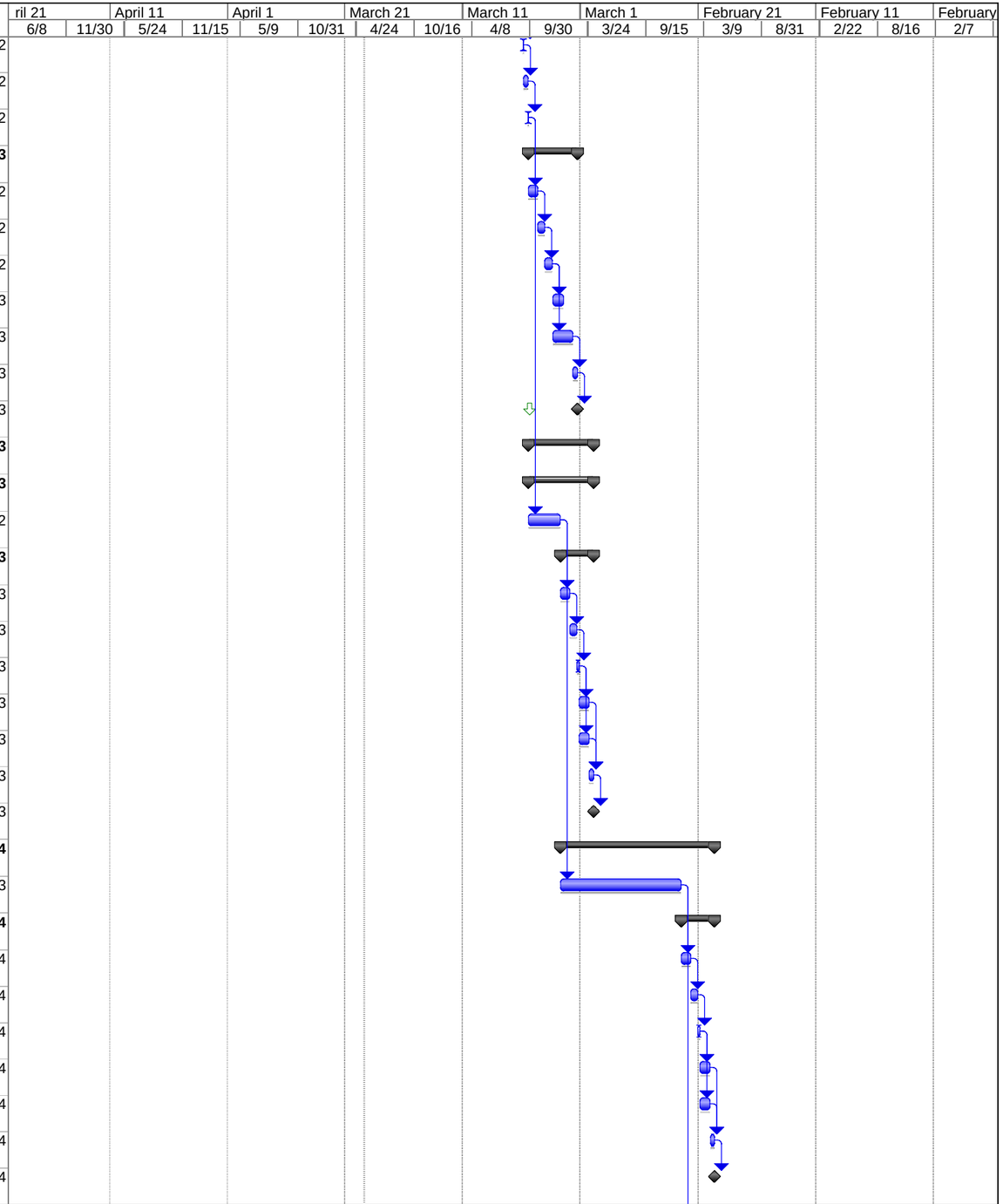
Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

ID	Task Name	Duration	Start	Finish
320	**Proposed Plan**	**131 days**	**Wed 1/25/12**	**Fri 7/27/12**
321	Draft	15 days	Wed 1/25/12	Tue 2/14/12
322	Army Review	15 days	Wed 2/15/12	Tue 3/6/12
323	Draft Final	5 days	Wed 3/7/12	Tue 3/13/12
324	MDE Review	22 days	Wed 3/14/12	Thu 4/12/12
325	EPA Review	42 days	Wed 3/14/12	Thu 5/10/12
326	Final	10 days	Fri 5/11/12	Thu 5/24/12
327	Comment Resolution	22 days	Fri 5/25/12	Tue 6/26/12
328	Approved Proposed Plan	0 days	Tue 6/26/12	Tue 6/26/12
329	Public Meeting	1 day	Thu 7/12/12	Thu 7/12/12
330	Public Comment Period	22 days	Wed 6/27/12	Fri 7/27/12
331	**Decision Document**	**151 days**	**Fri 5/11/12**	**Fri 12/14/12**
332	Draft	15 days	Fri 5/11/12	Fri 6/1/12
333	Army Review	15 days	Mon 6/4/12	Fri 6/22/12
334	Draft Final	10 days	Mon 6/25/12	Mon 7/9/12
335	MDE Review	22 days	Tue 7/10/12	Wed 8/8/12
336	EPA Review	42 days	Tue 7/10/12	Thu 9/6/12
337	Comment Resolution	22 days	Fri 9/7/12	Mon 10/8/12
338	Final	10 days	Tue 10/9/12	Mon 10/22/12
339	Army Signature	15 days	Tue 10/23/12	Mon 11/12/12
340	EPA Legal and Signature	22 days	Tue 11/13/12	Fri 12/14/12
341	Signed DD	0 days	Fri 12/14/12	Fri 12/14/12
342	**Remedial Design**	**124 days**	**Tue 7/10/12**	**Fri 1/4/13**
343	Draft	15 days	Tue 7/10/12	Mon 7/30/12
344	Army Review	15 days	Tue 7/31/12	Mon 8/20/12
345	Draft Final	14 days	Tue 8/21/12	Mon 9/10/12
346	MDE Review	22 days	Tue 10/9/12	Wed 11/7/12
347	EPA Review	33 days	Tue 10/9/12	Mon 11/26/12
348	Comment Resolution	22 days	Tue 11/27/12	Thu 12/27/12
349	Final	5 days	Fri 12/28/12	Fri 1/4/13
350	Approved RD	0 days	Fri 1/4/13	Fri 1/4/13
351	**Remedial Action**	**12 days**	**Tue 9/11/12**	**Wed 9/26/12**



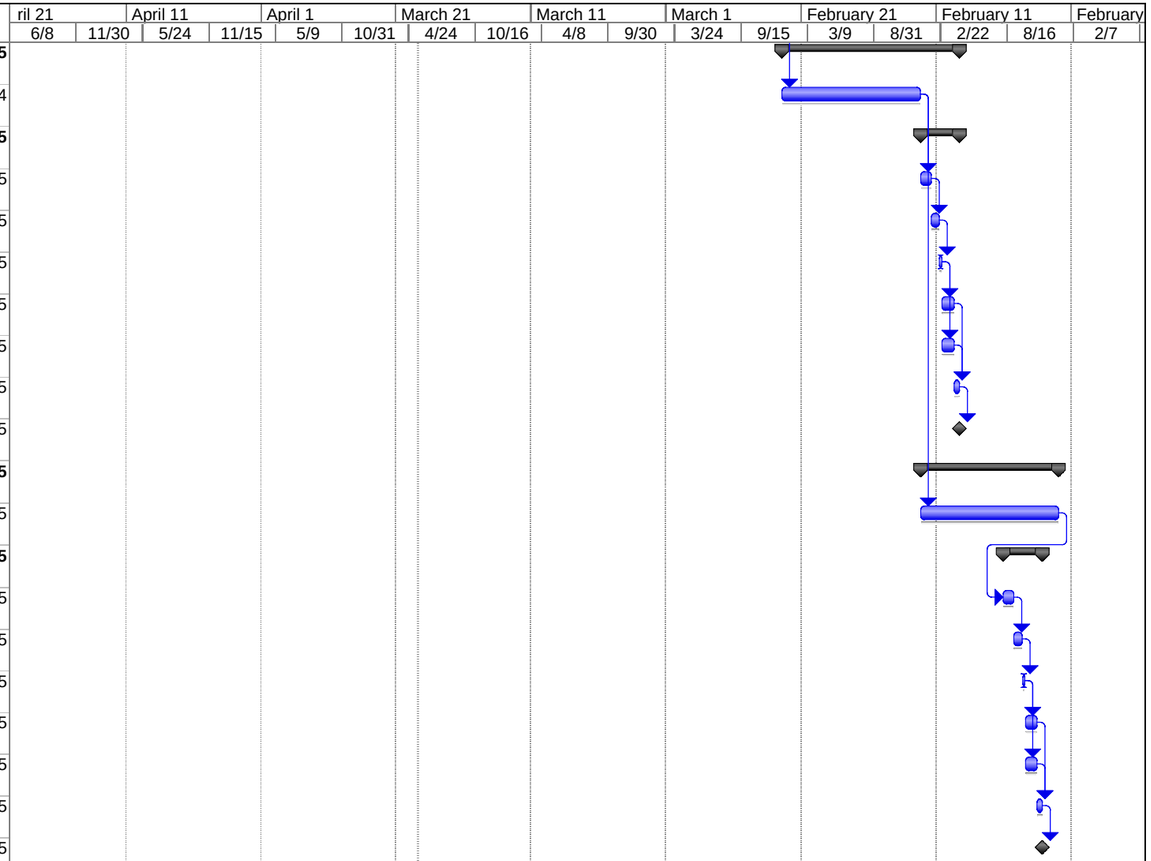
ID	Task Name	Duration	Start	Finish
352	Mobilization	1 day	Tue 9/11/12	Tue 9/11/12
353	Implement RA	10 days	Wed 9/12/12	Tue 9/25/12
354	Demobilization	1 day	Wed 9/26/12	Wed 9/26/12
355	**Remedial Action Report**	**102 days**	**Thu 9/27/12**	**Thu 2/21/13**
356	Draft	20 days	Thu 9/27/12	Wed 10/24/12
357	Army Review	15 days	Thu 10/25/12	Wed 11/14/12
358	Draft Final	15 days	Thu 11/15/12	Fri 12/7/12
359	MDE Review	22 days	Mon 12/10/12	Thu 1/10/13
360	EPA Review	42 days	Mon 12/10/12	Thu 2/7/13
361	Final	10 days	Fri 2/8/13	Thu 2/21/13
362	Approved RAR (GW RIP and SL RC)	0 days	Thu 2/21/13	Thu 2/21/13
363	**LTO/LTM**	**137 days**	**Thu 9/27/12**	**Thu 4/11/13**
364	**Year 1 (2012)**	**137 days**	**Thu 9/27/12**	**Thu 4/11/13**
365	LTO/LTM	65 days	Thu 9/27/12	Mon 12/31/12
366	**Annual Report**	**72 days**	**Wed 1/2/13**	**Thu 4/11/13**
367	Draft	20 days	Wed 1/2/13	Tue 1/29/13
368	Army Review	15 days	Wed 1/30/13	Tue 2/19/13
369	Draft Final	5 days	Wed 2/20/13	Tue 2/26/13
370	MDE Review	22 days	Wed 2/27/13	Thu 3/28/13
371	EPA Review	22 days	Wed 2/27/13	Thu 3/28/13
372	Final	10 days	Fri 3/29/13	Thu 4/11/13
373	Approved	0 days	Thu 4/11/13	Thu 4/11/13
374	**Year 2 (2013)**	**326 days**	**Wed 1/2/13**	**Fri 4/11/14**
375	LTO/LTM	254 days	Wed 1/2/13	Tue 12/31/13
376	**Annual Report**	**72 days**	**Thu 1/2/14**	**Fri 4/11/14**
377	Draft	20 days	Thu 1/2/14	Wed 1/29/14
378	Army Review	15 days	Thu 1/30/14	Wed 2/19/14
379	Draft Final	5 days	Thu 2/20/14	Wed 2/26/14
380	MDE Review	22 days	Thu 2/27/14	Fri 3/28/14
381	EPA Review	22 days	Thu 2/27/14	Fri 3/28/14
382	Final	10 days	Mon 3/31/14	Fri 4/11/14
383	Approved	0 days	Fri 4/11/14	Fri 4/11/14



Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

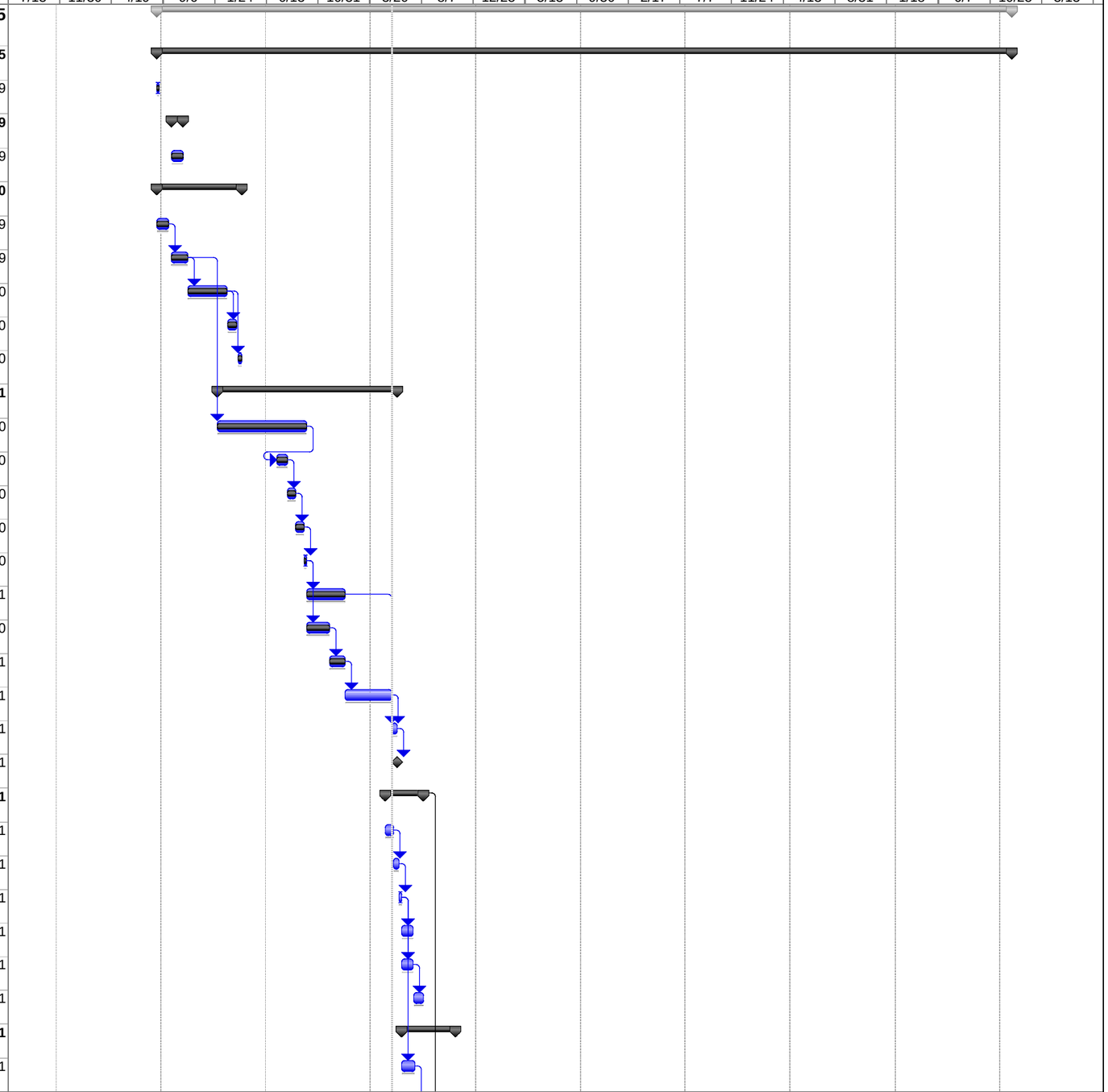
ID	Task Name	Duration	Start	Finish
384	**Year 3 (2014)**	**326 days**	**Thu 1/2/14**	**Mon 4/13/15**
385	LTO/LTM	254 days	Thu 1/2/14	Wed 12/31/14
386	**Annual Report**	**72 days**	**Fri 1/2/15**	**Mon 4/13/15**
387	Draft	20 days	Fri 1/2/15	Thu 1/29/15
388	Army Review	15 days	Fri 1/30/15	Thu 2/19/15
389	Draft Final	5 days	Fri 2/20/15	Thu 2/26/15
390	MDE Review	22 days	Fri 2/27/15	Mon 3/30/15
391	EPA Review	22 days	Fri 2/27/15	Mon 3/30/15
392	Final	10 days	Tue 3/31/15	Mon 4/13/15
393	Approved	0 days	Mon 4/13/15	Mon 4/13/15
394	**Year 4 (2015)**	**253 days**	**Fri 1/2/15**	**Wed 12/30/15**
395	LTO/LTM	253 days	Fri 1/2/15	Wed 12/30/15
396	**Annual Report**	**72 days**	**Fri 8/7/15**	**Tue 11/17/15**
397	Draft	20 days	Fri 8/7/15	Thu 9/3/15
398	Army Review	15 days	Fri 9/4/15	Fri 9/25/15
399	Draft Final	5 days	Mon 9/28/15	Fri 10/2/15
400	MDE Review	22 days	Mon 10/5/15	Tue 11/3/15
401	EPA Review	22 days	Mon 10/5/15	Tue 11/3/15
402	Final	10 days	Wed 11/4/15	Tue 11/17/15
403	Approved	0 days	Tue 11/17/15	Tue 11/17/15



Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

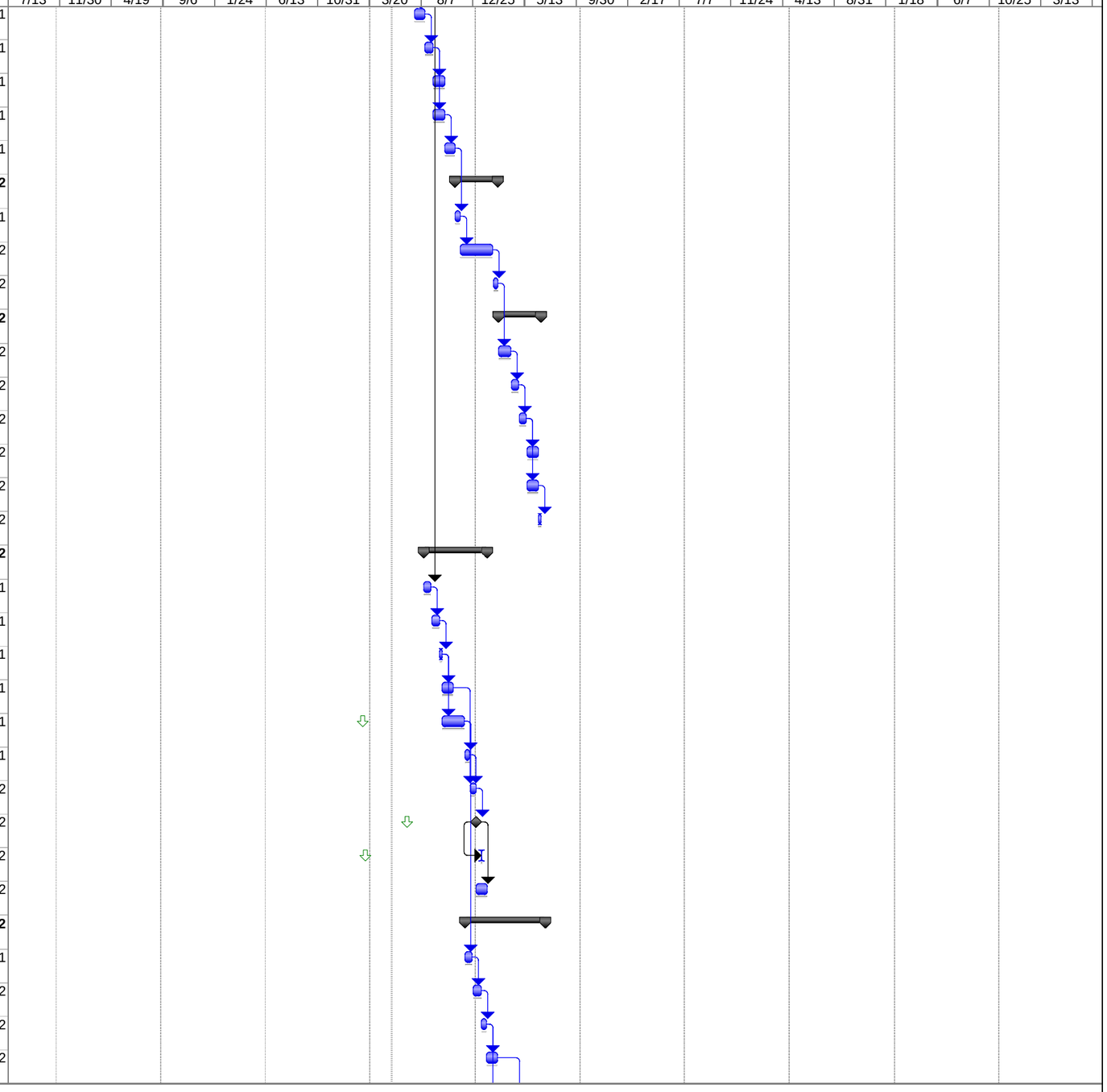
ID	Task Name	Duration	Start	Finish
0	**Ft. Meade PBA Schedule**	**1613 days**	**Fri 8/21/09**	**Wed 12/23/15**
1	**FGGM-93 - Manor View Dump Site**	**1613 days**	**Fri 8/21/09**	**Wed 12/23/15**
2	Initial Planning	4 days	Fri 8/21/09	Wed 8/26/09
3	**Pre-FS Activities**	**23 days**	**Wed 9/30/09**	**Fri 10/30/09**
4	RTCs to EPA on Final RI	23 days	Wed 9/30/09	Fri 10/30/09
5	**Feasibility Study Investigation**	**163 days**	**Fri 8/21/09**	**Wed 4/7/10**
6	Supplemental Workplan	22 days	Fri 8/21/09	Mon 9/21/09
7	GW Sampling	33 days	Tue 9/29/09	Thu 11/12/09
8	Pre-FS Workplan	75 days	Fri 11/13/09	Fri 2/26/10
9	Army Review	18 days	Mon 3/1/10	Wed 3/24/10
10	Pre-Design Investigation	8 days	Mon 3/29/10	Wed 4/7/10
11	**Feasibility Study**	**341 days**	**Mon 2/1/10**	**Thu 6/2/11**
12	Draft	171 days	Mon 2/1/10	Thu 9/30/10
13	Army Review	21 days	Mon 7/12/10	Mon 8/9/10
14	Prepare RTCs	16 days	Tue 8/10/10	Tue 8/31/10
15	Army Review of RTCs	16 days	Wed 9/1/10	Thu 9/23/10
16	Draft	5 days	Fri 9/24/10	Thu 9/30/10
17	MDE Review	70 days	Fri 10/1/10	Wed 1/12/11
18	EPA Review	42 days	Fri 10/1/10	Wed 12/1/10
19	EPA extension (20 day)	28 days	Thu 12/2/10	Wed 1/12/11
20	Comment Resolution (Draft Final)	90 days	Thu 1/13/11	Wed 5/18/11
21	Final	10 days	Thu 5/19/11	Thu 6/2/11
22	Approved FS	0 days	Thu 6/2/11	Thu 6/2/11
23	**Non-Time Critical Removal Action**	**73 days**	**Mon 5/2/11**	**Fri 8/12/11**
24	Draft EECA	16 days	Mon 5/2/11	Mon 5/23/11
25	Army Review	10 days	Tue 5/24/11	Tue 6/7/11
26	Draft Final EECA	5 days	Wed 6/8/11	Tue 6/14/11
27	EPA Review	22 days	Wed 6/15/11	Fri 7/15/11
28	MDE Review	22 days	Wed 6/15/11	Fri 7/15/11
29	Final EECA	20 days	Mon 7/18/11	Fri 8/12/11
30	**Non-Time Critical Removal Action Workplan**	**102 days**	**Wed 6/15/11**	**Mon 11/7/11**
31	Draft WP	25 days	Wed 6/15/11	Wed 7/20/11



Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

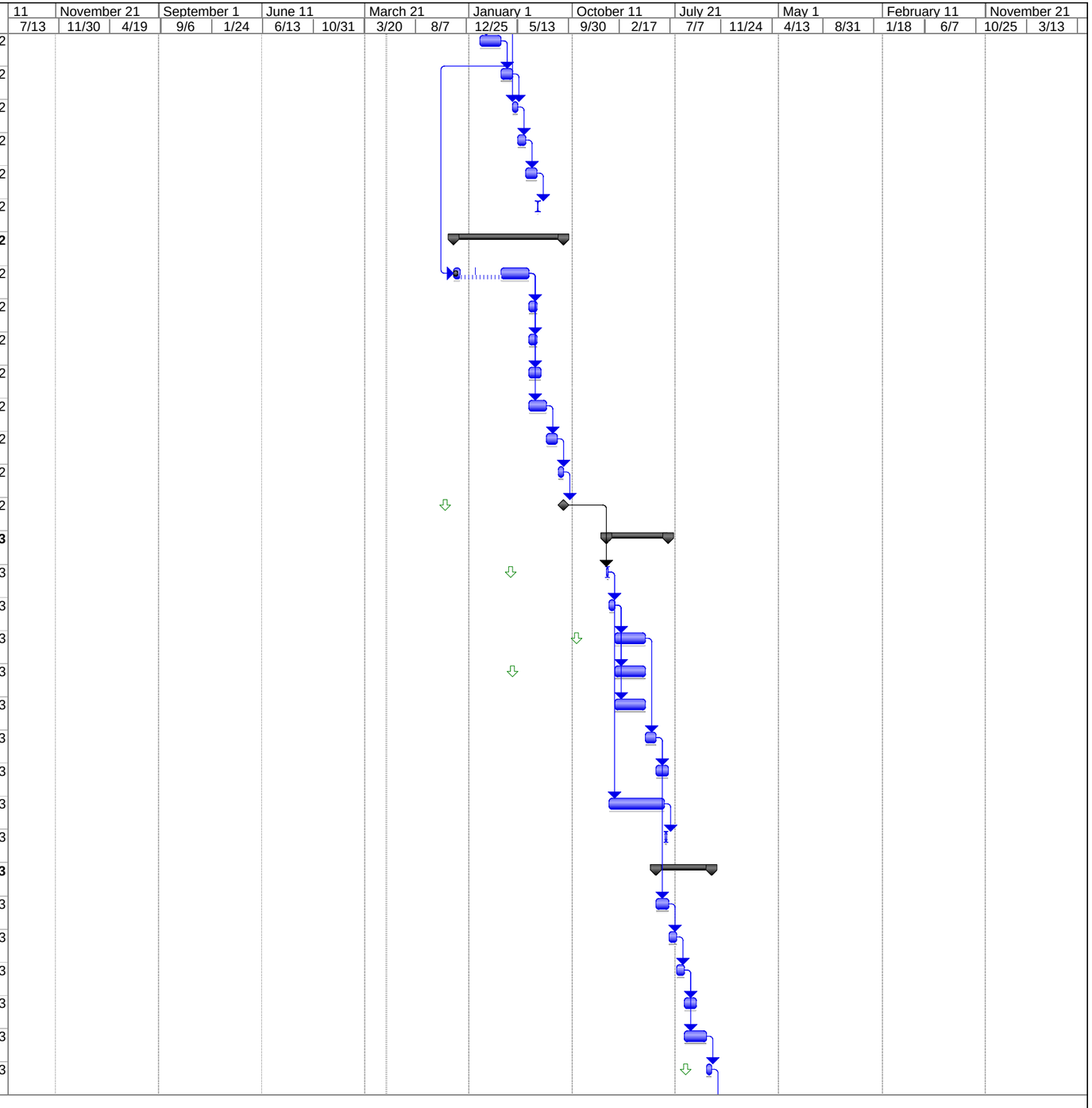
ID	Task Name	Duration	Start	Finish
32	Army Review	20 days	Thu 7/21/11	Wed 8/17/11
33	Draft Final WP	15 days	Thu 8/18/11	Thu 9/8/11
34	EPA Review	22 days	Fri 9/9/11	Mon 10/10/11
35	MDE Review	22 days	Fri 9/9/11	Mon 10/10/11
36	Final WP	20 days	Tue 10/11/11	Mon 11/7/11
37	**Non Time Critical Removal Action**	**80 days**	**Tue 11/8/11**	**Fri 3/2/12**
38	Mobilize	10 days	Tue 11/8/11	Mon 11/21/11
39	Removal Action	60 days	Tue 11/22/11	Fri 2/17/12
40	Demobilize	10 days	Mon 2/20/12	Fri 3/2/12
41	**Interim Action Report**	**82 days**	**Mon 3/5/12**	**Wed 6/27/12**
42	Draft Report	25 days	Mon 3/5/12	Fri 4/6/12
43	Army Review	15 days	Mon 4/9/12	Fri 4/27/12
44	Draft Final Report	15 days	Mon 4/30/12	Fri 5/18/12
45	EPA Review	22 days	Mon 5/21/12	Wed 6/20/12
46	MDE Review	22 days	Mon 5/21/12	Wed 6/20/12
47	Final Report	5 days	Thu 6/21/12	Wed 6/27/12
48	**Proposed Plan**	**119 days**	**Mon 8/15/11**	**Thu 2/2/12**
49	Draft	15 days	Mon 8/15/11	Fri 9/2/11
50	Army Review	15 days	Tue 9/6/11	Mon 9/26/11
51	Draft Final	5 days	Tue 9/27/11	Mon 10/3/11
52	MDE Review	22 days	Tue 10/4/11	Wed 11/2/11
53	EPA Review	42 days	Tue 10/4/11	Fri 12/2/11
54	Comment Resolution	10 days	Mon 12/5/11	Fri 12/16/11
55	Prepare Final	10 days	Mon 12/19/11	Tue 1/3/12
56	Approved Proposed Plan	0 days	Tue 1/3/12	Tue 1/3/12
57	Public Meeting	1 day	Wed 1/18/12	Wed 1/18/12
58	Public Comment Period	22 days	Wed 1/4/12	Thu 2/2/12
59	**Decision Document**	**152 days**	**Mon 12/5/11**	**Mon 7/9/12**
60	Draft	15 days	Mon 12/5/11	Fri 12/23/11
61	Army Review	15 days	Tue 12/27/11	Tue 1/17/12
62	Draft Final	10 days	Wed 1/18/12	Tue 1/31/12
63	MDE Review	22 days	Wed 2/1/12	Thu 3/1/12



Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

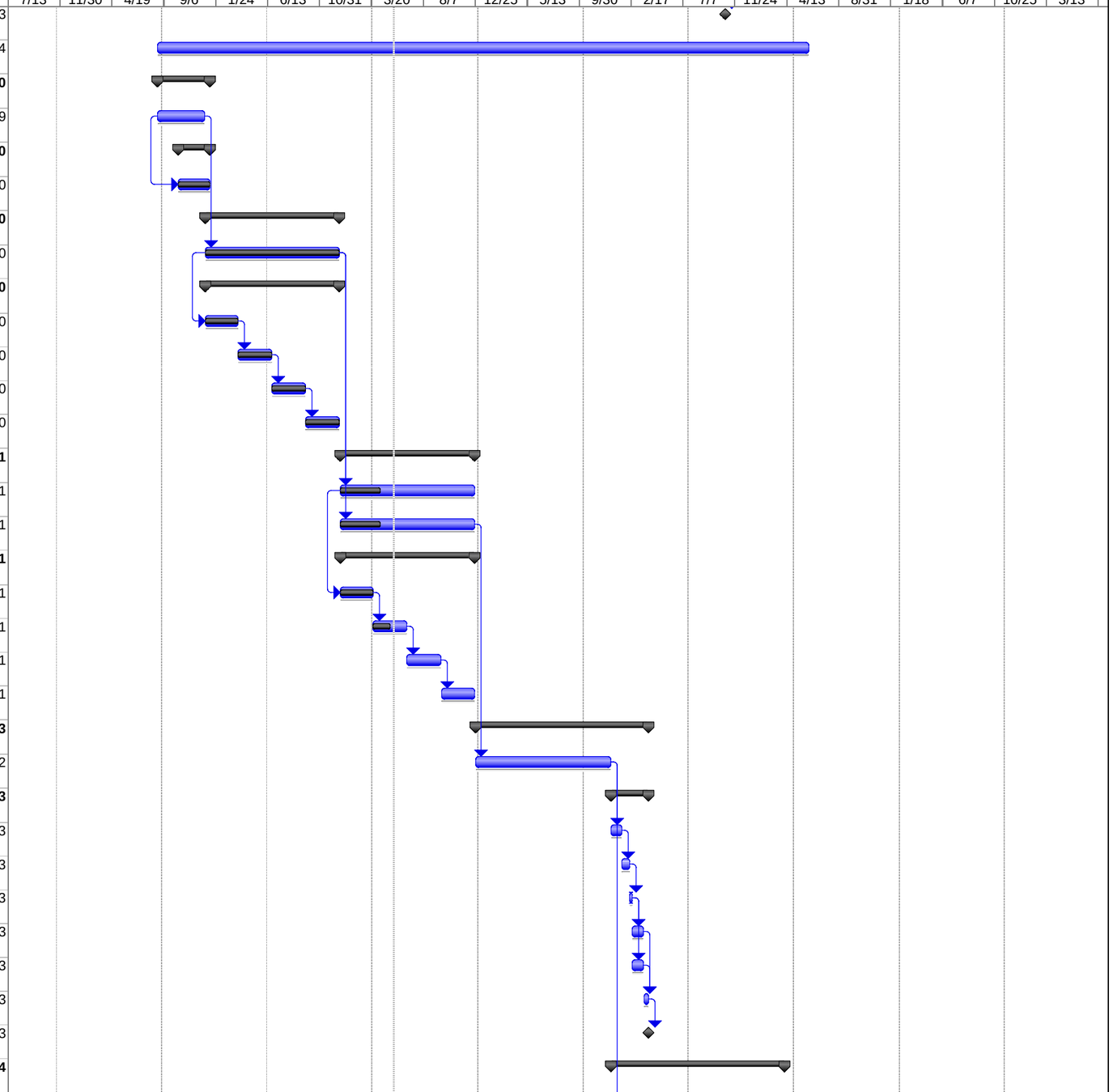
ID	Task Name	Duration	Start	Finish
64	EPA Review	42 days	Wed 2/1/12	Thu 3/29/12
65	Comment Resolution	22 days	Fri 3/30/12	Mon 4/30/12
66	Final	10 days	Tue 5/1/12	Mon 5/14/12
67	Army Signature	15 days	Tue 5/15/12	Tue 6/5/12
68	EPA Legal and Signature	22 days	Wed 6/6/12	Fri 7/6/12
69	Signed DD	1 day	Mon 7/9/12	Mon 7/9/12
70	**Remedial Design**	**209 days**	**Mon 11/21/11**	**Mon 9/17/12**
71	Draft	60 days	Mon 11/21/11	Thu 6/14/12
72	Army Review	15 days	Fri 6/15/12	Fri 7/6/12
73	Draft Final	15 days	Fri 6/15/12	Fri 7/6/12
74	MDE Review	22 days	Fri 6/15/12	Tue 7/17/12
75	EPA Review	33 days	Fri 6/15/12	Wed 8/1/12
76	Comment Resolution	22 days	Thu 8/2/12	Fri 8/31/12
77	Final	10 days	Tue 9/4/12	Mon 9/17/12
78	Approved RD	0 days	Mon 9/17/12	Mon 9/17/12
79	**Remedial Action**	**121 days**	**Mon 1/14/13**	**Tue 7/2/13**
80	Mobilization	5 days	Mon 1/14/13	Fri 1/18/13
81	Site Setup	12 days	Mon 1/21/13	Tue 2/5/13
82	Excavation	60 days	Wed 2/6/13	Tue 4/30/13
83	Dewatering	60 days	Wed 2/6/13	Tue 4/30/13
84	Stormwater Management	60 days	Wed 2/6/13	Tue 4/30/13
85	Backfill and restoration	20 days	Wed 5/1/13	Wed 5/29/13
86	Soil Cover	24 days	Thu 5/30/13	Tue 7/2/13
87	Admin and Office Support	109 days	Mon 1/21/13	Fri 6/21/13
88	Initial GW Sampling Event	5 days	Mon 6/24/13	Fri 6/28/13
89	**Remedial Action Report**	**107 days**	**Thu 5/30/13**	**Tue 10/29/13**
90	Draft	25 days	Thu 5/30/13	Wed 7/3/13
91	Army Review	15 days	Fri 7/5/13	Thu 7/25/13
92	Draft Final	15 days	Thu 7/25/13	Thu 8/15/13
93	MDE Review	22 days	Fri 8/16/13	Tue 9/17/13
94	EPA Review	42 days	Fri 8/16/13	Tue 10/15/13
95	Final	2 days	Tue 10/15/13	Tue 10/29/13



Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

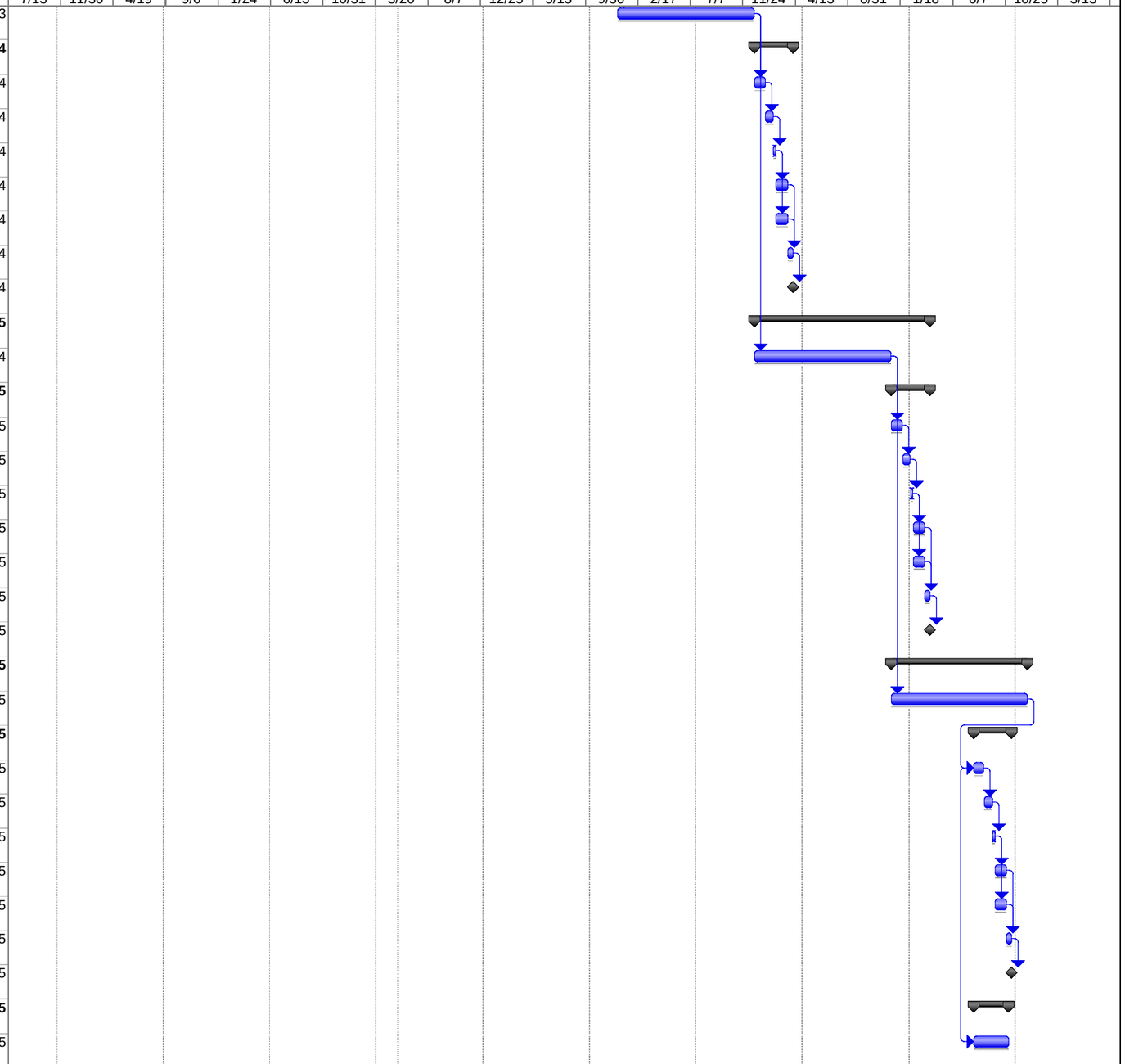
ID	Task Name	Duration	Start	Finish
96	Approved RAR (RIP)	0 days	Tue 10/29/13	Tue 10/29/13
97	LTO/LTM	1224 days	Fri 8/21/09	Wed 6/11/14
98	**2009**	**100 days**	**Fri 8/21/09**	**Fri 1/8/10**
99	GW Sampling	91 days	Fri 8/21/09	Fri 12/25/09
100	**Quarterly Report**	**60 days**	**Fri 10/16/09**	**Fri 1/8/10**
101	Q4	60 days	Fri 10/16/09	Fri 1/8/10
102	**2010**	**253 days**	**Mon 12/28/09**	**Thu 12/23/10**
103	Run Methane Collection System	253 days	Mon 12/28/09	Thu 12/23/10
104	**Weekly Reporting**	**253 days**	**Mon 12/28/09**	**Thu 12/23/10**
105	Q1	63 days	Mon 12/28/09	Thu 3/25/10
106	Q2	64 days	Fri 3/26/10	Thu 6/24/10
107	Q3	63 days	Fri 6/25/10	Thu 9/23/10
108	Q4	63 days	Fri 9/24/10	Thu 12/23/10
109	**2011**	**254 days**	**Mon 12/27/10**	**Fri 12/23/11**
110	Run Methane Collection System	254 days	Mon 12/27/10	Fri 12/23/11
111	LTM/LTO	254 days	Mon 12/27/10	Fri 12/23/11
112	**Quarterly Report**	**254 days**	**Mon 12/27/10**	**Fri 12/23/11**
113	Q1	63 days	Mon 12/27/10	Thu 3/24/11
114	Q2	64 days	Fri 3/25/11	Thu 6/23/11
115	Q3	64 days	Fri 6/24/11	Fri 9/23/11
116	Q4	63 days	Mon 9/26/11	Fri 12/23/11
117	**2012 (Post RIP)**	**326 days**	**Tue 12/27/11**	**Fri 4/5/13**
118	LTO/LTM	254 days	Tue 12/27/11	Mon 12/24/12
119	**Annual Report**	**72 days**	**Wed 12/26/12**	**Fri 4/5/13**
120	Draft	20 days	Wed 12/26/12	Wed 1/23/13
121	Army Review	15 days	Thu 1/24/13	Wed 2/13/13
122	Draft Final	5 days	Thu 2/14/13	Wed 2/20/13
123	MDE Review	22 days	Thu 2/21/13	Fri 3/22/13
124	EPA Review	22 days	Thu 2/21/13	Fri 3/22/13
125	Final	10 days	Mon 3/25/13	Fri 4/5/13
126	Approved	0 days	Fri 4/5/13	Fri 4/5/13
127	**2013**	**326 days**	**Wed 12/26/12**	**Mon 4/7/14**



Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

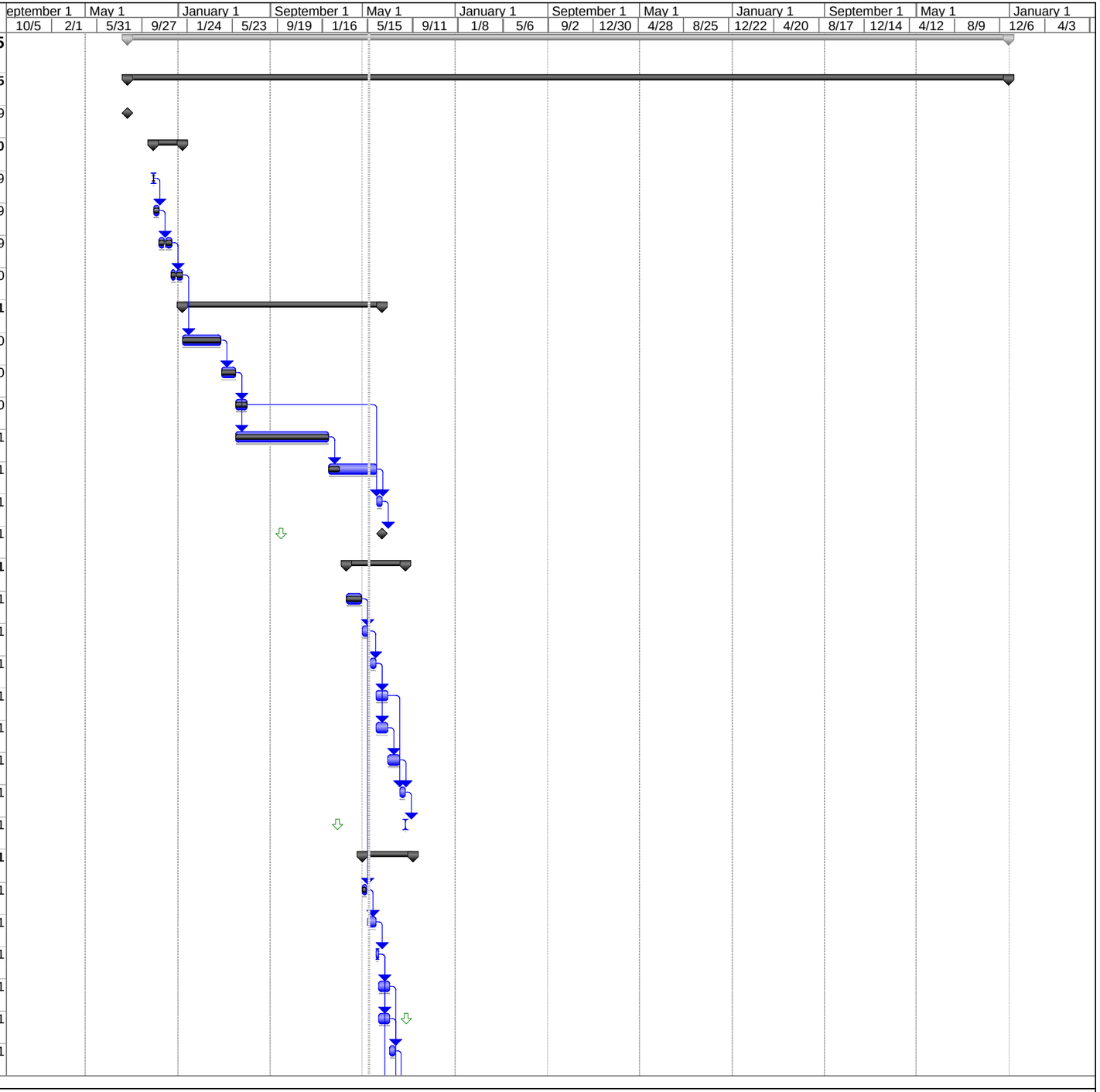
ID	Task Name	Duration	Start	Finish
128	LTO/LTM	254 days	Wed 12/26/12	Tue 12/24/13
129	**Annual Report**	**72 days**	**Thu 12/26/13**	**Mon 4/7/14**
130	Draft	20 days	Thu 12/26/13	Thu 1/23/14
131	Army Review	15 days	Fri 1/24/14	Thu 2/13/14
132	Draft Final	5 days	Fri 2/14/14	Thu 2/20/14
133	MDE Review	22 days	Fri 2/21/14	Mon 3/24/14
134	EPA Review	22 days	Fri 2/21/14	Mon 3/24/14
135	Final	10 days	Tue 3/25/14	Mon 4/7/14
136	Approved	0 days	Mon 4/7/14	Mon 4/7/14
137	**2014**	**326 days**	**Thu 12/26/13**	**Tue 4/7/15**
138	LTO/LTM	254 days	Thu 12/26/13	Wed 12/24/14
139	**Annual Report**	**72 days**	**Fri 12/26/14**	**Tue 4/7/15**
140	Draft	20 days	Fri 12/26/14	Fri 1/23/15
141	Army Review	15 days	Mon 1/26/15	Fri 2/13/15
142	Draft Final	5 days	Mon 2/16/15	Fri 2/20/15
143	MDE Review	22 days	Mon 2/23/15	Tue 3/24/15
144	EPA Review	22 days	Mon 2/23/15	Tue 3/24/15
145	Final	10 days	Wed 3/25/15	Tue 4/7/15
146	Approved	0 days	Tue 4/7/15	Tue 4/7/15
147	**2015**	**253 days**	**Fri 12/26/14**	**Wed 12/23/15**
148	LTO/LTM	253 days	Fri 12/26/14	Wed 12/23/15
149	**Annual Report**	**72 days**	**Mon 8/3/15**	**Wed 11/11/15**
150	Draft	20 days	Mon 8/3/15	Fri 8/28/15
151	Army Review	15 days	Mon 8/31/15	Mon 9/21/15
152	Draft Final	5 days	Tue 9/22/15	Mon 9/28/15
153	MDE Review	22 days	Tue 9/29/15	Wed 10/28/15
154	EPA Review	22 days	Tue 9/29/15	Wed 10/28/15
155	Final	10 days	Thu 10/29/15	Wed 11/11/15
156	Approved	0 days	Wed 11/11/15	Wed 11/11/15
157	**Methane Decommissioning**	**66 days**	**Mon 8/3/15**	**Tue 11/3/15**
158	Annual Report	66 days	Mon 8/3/15	Tue 11/3/15



Project: Ft. Meade PBA Schedule
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

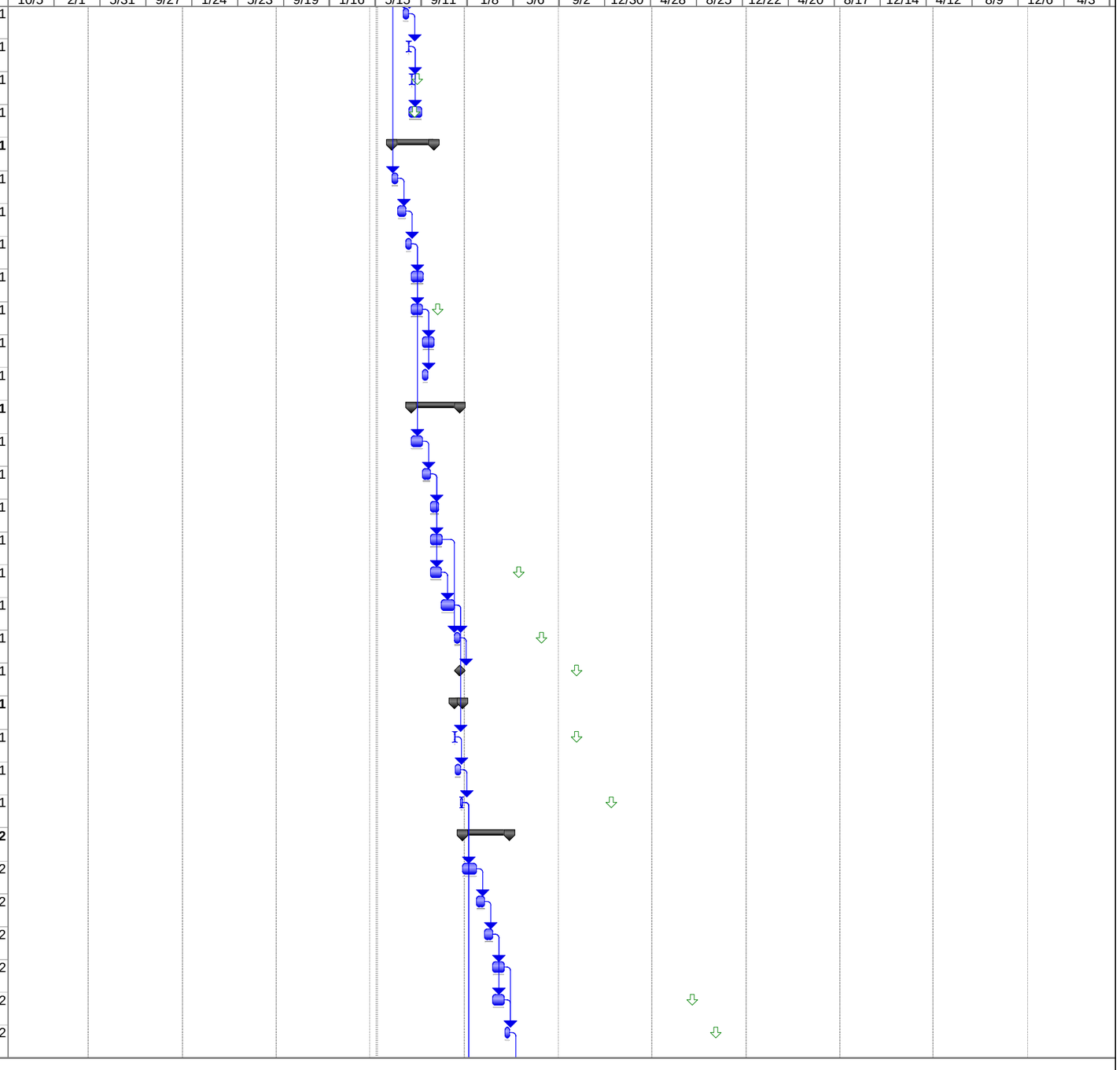
ID	Task Name	Duration	Start	Finish
0	**Ft. Meade Mortar Range**	**1617 days**	**Fri 8/21/09**	**Wed 12/30/15**
1	**FGGM-003-R-01 - Mortar Range**	**1617 days**	**Fri 8/21/09**	**Wed 12/30/15**
2	Initial Planning	0 days	Fri 8/21/09	Fri 8/21/09
3	**Remedial Investigation Work Plan**	**54 days**	**Wed 10/28/09**	**Tue 1/12/10**
4	Comment Resolution	1 day	Wed 10/28/09	Wed 10/28/09
5	Final	10 days	Thu 10/29/09	Wed 11/11/09
6	Approved RIWP	24 days	Thu 11/12/09	Tue 12/15/09
7	Field Work	21 days	Mon 12/14/09	Tue 1/12/10
8	**Complete Remedial Investigation Report**	**368 days**	**Wed 1/13/10**	**Wed 6/22/11**
9	Prepare Draft Final	73 days	Wed 1/13/10	Fri 4/23/10
10	Army Review	26 days	Mon 4/26/10	Tue 6/1/10
11	MDE Review	22 days	Wed 6/2/10	Thu 7/1/10
12	EPA Review	169 days	Wed 6/2/10	Tue 2/1/11
13	Comment Resolution	90 days	Wed 2/2/11	Wed 6/8/11
14	Final	10 days	Thu 6/9/11	Wed 6/22/11
15	Approved RI	0 days	Wed 6/22/11	Wed 6/22/11
16	**Feasibility Study**	**110 days**	**Mon 3/21/11**	**Tue 8/23/11**
17	Draft	30 days	Mon 3/21/11	Fri 4/29/11
18	Army Review	15 days	Mon 5/2/11	Fri 5/20/11
19	Draft Final	10 days	Mon 5/23/11	Mon 6/6/11
20	MDE Review	22 days	Tue 6/7/11	Thu 7/7/11
21	EPA Review	22 days	Tue 6/7/11	Thu 7/7/11
22	Comment Resolution	22 days	Fri 7/8/11	Mon 8/8/11
23	Final	10 days	Tue 8/9/11	Mon 8/22/11
24	Approved FS	1 day	Tue 8/23/11	Tue 8/23/11
25	**Proposed Plan**	**93 days**	**Mon 5/2/11**	**Mon 9/12/11**
26	Draft	10 days	Mon 5/2/11	Fri 5/13/11
27	Army Review	15 days	Mon 5/16/11	Mon 6/6/11
28	Draft Final	5 days	Tue 6/7/11	Mon 6/13/11
29	MDE Review	20 days	Tue 6/14/11	Tue 7/12/11
30	EPA Review	20 days	Tue 6/14/11	Tue 7/12/11
31	Comment Resolution	10 days	Wed 7/13/11	Tue 7/26/11



Project: Ft. Meade Mortar Range
Date: Wed 5/18/11

Task
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Rolled Up Progress
Split
External Tasks
Project Summary
Group By Summary
Deadline

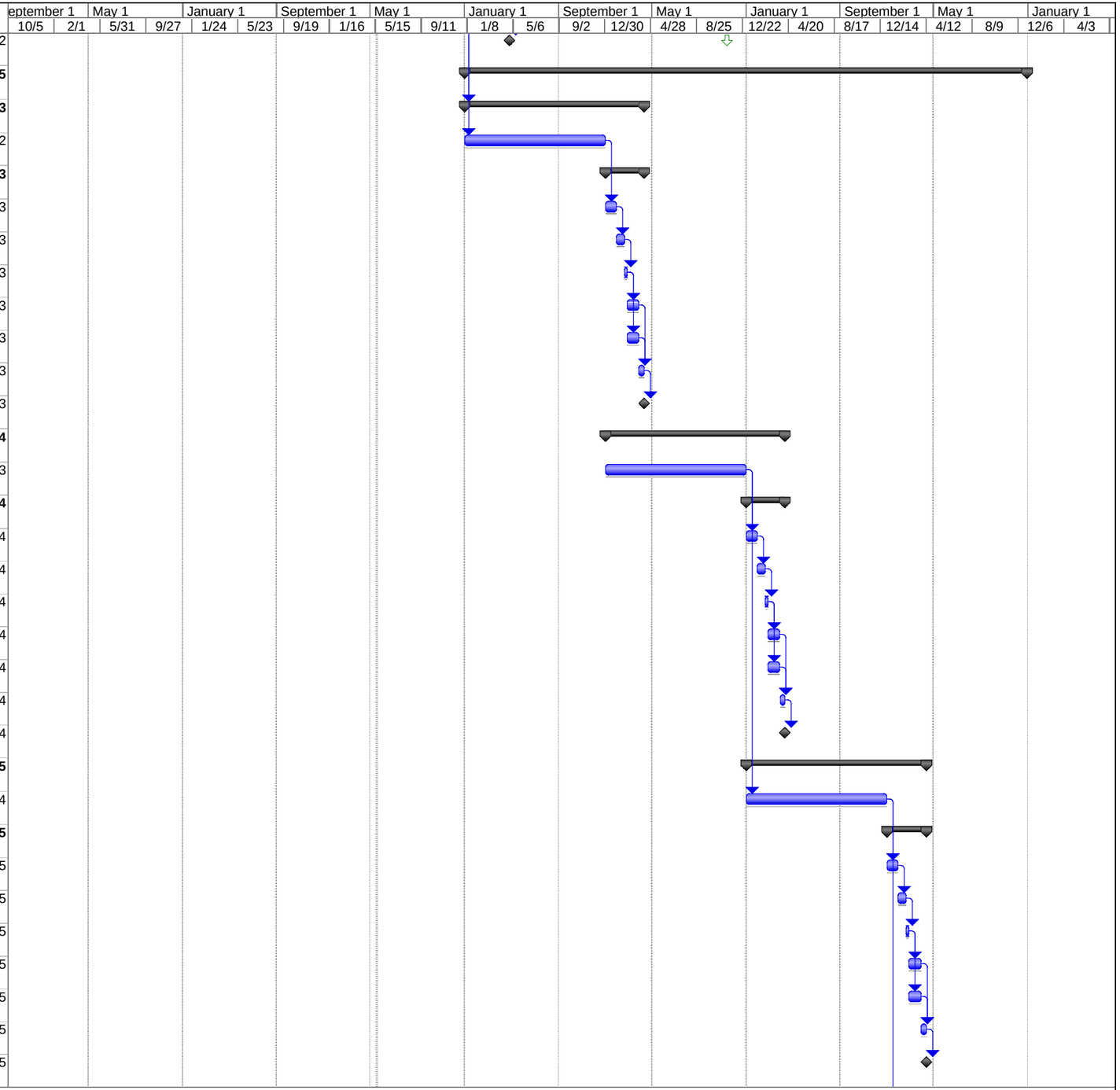
ID	Task Name	Duration	Start	Finish
32	Prepare Final	10 days	Wed 7/27/11	Tue 8/9/11
33	Approved Proposed Plan	1 day	Wed 8/10/11	Wed 8/10/11
34	Public Meeting	1 day	Thu 8/18/11	Thu 8/18/11
35	Public Comment Period	22 days	Thu 8/11/11	Mon 9/12/11
36	**Decision Document**	**77 days**	**Tue 6/28/11**	**Fri 10/14/11**
37	Draft	10 days	Tue 6/28/11	Tue 7/12/11
38	Army Review	15 days	Wed 7/13/11	Tue 8/2/11
39	Draft Final	10 days	Wed 8/3/11	Tue 8/16/11
40	MDE Review	22 days	Wed 8/17/11	Fri 9/16/11
41	EPA Review	20 days	Wed 8/17/11	Wed 9/14/11
42	Comment Resolution and signature	22 days	Thu 9/15/11	Fri 10/14/11
43	Final	10 days	Thu 9/15/11	Wed 9/28/11
44	**Remedial Design (Includes ESS if required)**	**87 days**	**Wed 8/17/11**	**Tue 12/20/11**
45	Draft	20 days	Wed 8/17/11	Wed 9/14/11
46	Army Review	15 days	Thu 9/15/11	Wed 10/5/11
47	Draft Final	15 days	Thu 10/6/11	Wed 10/26/11
48	MDE Review	22 days	Thu 10/6/11	Fri 11/4/11
49	EPA Review	20 days	Thu 10/6/11	Wed 11/2/11
50	Comment Resolution	22 days	Thu 11/3/11	Tue 12/6/11
51	Final	10 days	Wed 12/7/11	Tue 12/20/11
52	Approved RD	0 days	Tue 12/20/11	Tue 12/20/11
53	**Remedial Action (Sitewide)**	**14 days**	**Wed 12/7/11**	**Tue 12/27/11**
54	Mobilization	2 days	Wed 12/7/11	Thu 12/8/11
55	Implement RA	10 days	Fri 12/9/11	Thu 12/22/11
56	Demobilization	2 days	Fri 12/23/11	Tue 12/27/11
57	**Remedial Action Report (Sitewide)**	**87 days**	**Wed 12/28/11**	**Fri 4/27/12**
58	Draft	25 days	Wed 12/28/11	Wed 2/1/12
59	Army Review	15 days	Thu 2/2/12	Wed 2/22/12
60	Draft Final	15 days	Thu 2/23/12	Wed 3/14/12
61	MDE Review	22 days	Thu 3/15/12	Fri 4/13/12
62	EPA Review	22 days	Thu 3/15/12	Fri 4/13/12
63	Final	10 days	Mon 4/16/12	Fri 4/27/12



Project: Ft. Meade Mortar Range
Date: Wed 5/18/11

Task
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Rolled Up Progress
Split
External Tasks
Project Summary
Group By Summary
Deadline

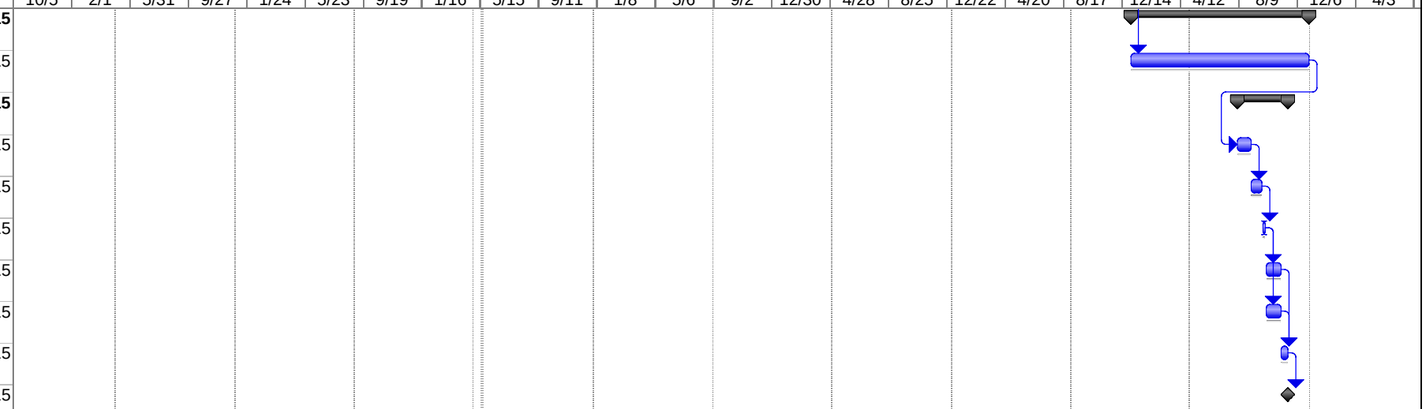
ID	Task Name	Duration	Start	Finish
64	Approved RAR (RIP)	0 days	Fri 4/27/12	Fri 4/27/12
65	**LTO/LTM**	**1015 days**	**Tue 1/3/12**	**Wed 12/30/15**
66	**Year 1 (2012)**	**326 days**	**Tue 1/3/12**	**Thu 4/11/13**
67	LTO/LTM	254 days	Tue 1/3/12	Mon 12/31/12
68	**Annual Report**	**72 days**	**Wed 1/2/13**	**Thu 4/11/13**
69	Draft	20 days	Wed 1/2/13	Tue 1/29/13
70	Army Review	15 days	Wed 1/30/13	Tue 2/19/13
71	Draft Final	5 days	Wed 2/20/13	Tue 2/26/13
72	MDE Review	22 days	Wed 2/27/13	Thu 3/28/13
73	EPA Review	22 days	Wed 2/27/13	Thu 3/28/13
74	Final	10 days	Fri 3/29/13	Thu 4/11/13
75	Approved	0 days	Thu 4/11/13	Thu 4/11/13
76	**Year 2 (2013)**	**326 days**	**Wed 1/2/13**	**Fri 4/11/14**
77	LTO/LTM	254 days	Wed 1/2/13	Tue 12/31/13
78	**Annual Report**	**72 days**	**Thu 1/2/14**	**Fri 4/11/14**
79	Draft	20 days	Thu 1/2/14	Wed 1/29/14
80	Army Review	15 days	Thu 1/30/14	Wed 2/19/14
81	Draft Final	5 days	Thu 2/20/14	Wed 2/26/14
82	MDE Review	22 days	Thu 2/27/14	Fri 3/28/14
83	EPA Review	22 days	Thu 2/27/14	Fri 3/28/14
84	Final	10 days	Mon 3/31/14	Fri 4/11/14
85	Approved	0 days	Fri 4/11/14	Fri 4/11/14
86	**Year 3 (2014)**	**326 days**	**Thu 1/2/14**	**Mon 4/13/15**
87	LTO/LTM	254 days	Thu 1/2/14	Wed 12/31/14
88	**Annual Report**	**72 days**	**Fri 1/2/15**	**Mon 4/13/15**
89	Draft	20 days	Fri 1/2/15	Thu 1/29/15
90	Army Review	15 days	Fri 1/30/15	Thu 2/19/15
91	Draft Final	5 days	Fri 2/20/15	Thu 2/26/15
92	MDE Review	22 days	Fri 2/27/15	Mon 3/30/15
93	EPA Review	22 days	Fri 2/27/15	Mon 3/30/15
94	Final	10 days	Tue 3/31/15	Mon 4/13/15
95	Approved	0 days	Mon 4/13/15	Mon 4/13/15



Project: Ft. Meade Mortar Range
Date: Wed 5/18/11

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

ID	Task Name	Duration	Start	Finish
96	**Year 4 (2015)**	**253 days**	**Fri 1/2/15**	**Wed 12/30/15**
97	LTO/LTM	253 days	Fri 1/2/15	Wed 12/30/15
98	**Annual Report**	**72 days**	**Fri 8/7/15**	**Tue 11/17/15**
99	Draft	20 days	Fri 8/7/15	Thu 9/3/15
100	Army Review	15 days	Fri 9/4/15	Fri 9/25/15
101	Draft Final	5 days	Mon 9/28/15	Fri 10/2/15
102	MDE Review	22 days	Mon 10/5/15	Tue 11/3/15
103	EPA Review	22 days	Mon 10/5/15	Tue 11/3/15
104	Final	10 days	Wed 11/4/15	Tue 11/17/15
105	Approved	0 days	Tue 11/17/15	Tue 11/17/15



Project: Ft. Meade Mortar Range
Date: Wed 5/18/11

Task
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Rolled Up Progress
Split
External Tasks
Project Summary
Group By Summary
Deadline

ID	Phase Number WBS	Task Number WBS	Task Name	Duration	Start	Finish
0			**Ft. Meade and Phoenix Mil. Res. PBA Schedule**	**2125 days**	**Fri 8/21/09**	**Fri 12/29/17**
1	**OU40**		**OU-4 Remedial Investigation**	**2125 days**	**Fri 8/21/09**	**Fri 12/29/17**
2	**OU40**	**BA009**	**Initial Planning**	**63.67 days**	**Fri 8/21/09**	**Wed 11/18/09**
3	OU40		Initial Planning	15 days	Fri 8/21/09	Fri 9/11/09
4	OU40		Initial CSM Review	20.67 days	Fri 9/11/09	Fri 10/9/09
5	OU40		CSM Meeting	1 day	Fri 10/9/09	Mon 10/12/09
6	OU40		Follow Up CSM Review	26 days	Mon 10/12/09	Tue 11/17/09
7	OU40		Follow Up CSM Meeting	1 day	Tue 11/17/09	Wed 11/18/09
8	**OU40**	**CH001**	**Remedial Investigation Work Plan Addendum OU4**	**238.5 days**	**Fri 8/21/09**	**Mon 7/26/10**
9	OU40		Suppl Workplan	26 days	Fri 8/21/09	Fri 9/25/09
10	OU40		Supp GW Sampling	44 days	Tue 9/29/09	Tue 12/1/09
11	OU40		Draft	53 days	Tue 9/29/09	Tue 12/15/09
12	OU40		Army Review	47 days	Tue 12/15/09	Fri 2/19/10
13	OU40		Draft Final (RI WP Addendum)	2 days	Thu 12/31/09	Mon 2/22/10
14	OU40		MDE Review	30 days	Mon 2/22/10	Mon 4/5/10
15	OU40		EPA Review	42 days	Mon 2/22/10	Wed 4/21/10
16	OU40		AOC review	34 days	Mon 2/22/10	Fri 4/9/10
17	OU40		MDE RTCs	28 days	Mon 4/5/10	Thu 5/13/10
18	ou40		EPA RTCs	16 days	Wed 4/21/10	Thu 5/13/10
19	OU40		AOC RTCs	1 day	Fri 4/9/10	Fri 4/9/10
20	OU40		AOC ROE request	102 days	Tue 3/2/10	Fri 7/23/10
21	OU40		Final	2 days	Mon 4/5/10	Mon 7/26/10
22	OU40		Approved RIWP	0 days	Mon 7/26/10	Mon 7/26/10
23	**OU40**	**DA001**	**Remedial Investigation OU4**	**275 days**	**Fri 8/21/09**	**Wed 9/15/10**
24	OU40		Mobilize	5 days	Mon 3/22/10	Fri 3/26/10
25	OU40		Field Work for OU-4 (Phase 1 - CPT and MIPs)	28 days	Tue 3/23/10	Thu 4/29/10
26	**OU40**		**Phase 1B - Rotosonic Drilling**	**275 days**	**Fri 8/21/09**	**Wed 9/15/10**
92	**OU40**	**DA003**	**Vapor Intrusion Study**	**315 days**	**Thu 9/9/10**	**Tue 12/6/11**
93	OU40		VI Work Plan - Internal Draft	6.5 days	Thu 9/9/10	Tue 10/5/10
94	OU40		Army Review	44 days	Tue 11/23/10	Thu 1/27/11
95	OU40		VI Work Plan - Draft	38 days	Thu 1/27/11	Mon 3/21/11
96	OU40		MDE Review	5 days	Tue 3/22/11	Mon 3/28/11
97	OU40		EPA Review	37 days	Tue 3/22/11	Wed 5/11/11
98	OU40		AOC review	41 days	Tue 3/22/11	Tue 5/17/11
99	OU40		MDE RTCs	1 day	Mon 3/28/11	Mon 3/28/11
100	OU40		EPA RTCs	46 days	Wed 5/11/11	Fri 7/15/11
101	OU40		AOC RTCs	41 days	Wed 5/18/11	Fri 7/15/11
102	OU40		VI Work Plan - Final	0 days	Fri 7/15/11	Fri 7/15/11
103	OU40		Approved VIWP	0 days	Wed 9/14/11	Wed 9/14/11
104	**OU40**		**VI Field Work (2 rounds)**	**182 days**	**Mon 3/21/11**	**Tue 12/6/11**
105	**OU40**		**Round 1 (Sub-Slab Soil Gas Sampling - OU4)**	**28 days**	**Mon 3/21/11**	**Wed 4/27/11**
106	OU40		Mobilization	4 days	Mon 3/21/11	Thu 3/24/11

ID		Phase Number WBS	Task Number WBS	Task Name	Duration	Start	Finish
107	✓	OU40		Building surveys	4 days	Mon 3/21/11	Thu 3/24/11
108	✓	OU40		Place Cannisters	2 days	Mon 4/4/11	Tue 4/5/11
109	✓	OU40		Retrieve Caninsters	1.5 days	Tue 4/5/11	Wed 4/6/11
110		OU40		Lab analysis	15 days	Thu 4/7/11	Wed 4/27/11
111		**OU40**		**Round 2 (Sub-slab soil gas and indoor air - OU4)**	**18 days**	**Mon 8/15/11**	**Thu 9/8/11**
112	✓	OU40		Mobilization	1 day	Mon 8/15/11	Mon 8/15/11
113	✓	OU40		Place Cannisters	1 day	Tue 8/16/11	Tue 8/16/11
114	✓	OU40		Retrieve Cannisters	1 day	Wed 8/17/11	Wed 8/17/11
115		OU40		Lab analysis	15 days	Thu 8/18/11	Thu 9/8/11
116		**OU40**		**Indoor Air Sampling Work Plan Letter**	**75 days**	**Tue 7/26/11**	**Tue 11/8/11**
117	✓	OU40		Army Review	17 days	Tue 7/26/11	Wed 8/17/11
118		OU40		Submit to EPA, MDE, AOC	5 days	Thu 8/18/11	Wed 8/24/11
119		OU40		EPA Review	42 days	Thu 8/25/11	Mon 10/24/11
120		OU40		EPA RTCs	5 days	Tue 10/25/11	Mon 10/31/11
121		OU40		MDE Review	42 days	Thu 8/25/11	Mon 10/24/11
122		OU40		MDE RTCs	5 days	Tue 10/25/11	Mon 10/31/11
123		OU40		AOC Review	42 days	Thu 8/25/11	Mon 10/24/11
124		OU40		AOC RTCs	5 days	Tue 10/25/11	Mon 10/31/11
125		OU40		Final Work Plan Letter	5 days	Tue 11/1/11	Mon 11/7/11
126		OU40		ROE Negotiation with AOC	1 day	Tue 11/8/11	Tue 11/8/11
127		**OU40**		**Indoor Air Sampling (AOC)**	**18 days**	**Wed 11/9/11**	**Tue 12/6/11**
128		OU40		Mobilization	1 day	Wed 11/9/11	Wed 11/9/11
129		OU40		Place Cannisters	1 day	Thu 11/10/11	Thu 11/10/11
130		OU40		Retrieve Cannisters	1 day	Fri 11/11/11	Fri 11/11/11
131		OU40		Lab analysis	15 days	Mon 11/14/11	Tue 12/6/11
132		**OU40**	**DA002**	**Off Site LPA Investigations 125d and 126d (Phase 2)**	**501 days**	**Tue 10/12/10**	**Mon 10/1/12**
133		**OU40**		**Source Identification Workplan**	**162 days**	**Thu 11/11/10**	**Fri 7/1/11**
134		OU40		Draft Workplan (based on OU4 field data)	162 days	Thu 11/11/10	Fri 7/1/11
135	✓	OU40		Army Review	15 days	Thu 11/18/10	Fri 12/10/10
136	✓	OU40		Draft Final Workplan	5 days	Mon 12/13/10	Fri 12/17/10
137	✓	OU40		MDE Review	22 days	Mon 12/20/10	Thu 1/20/11
138	✓	OU40		EPA Review	42 days	Mon 12/20/10	Thu 2/17/11
139	✓	OU40		Final	2 days	Fri 2/18/11	Mon 2/21/11
140	✓	OU40		Approved Workplan	1 day	Tue 2/22/11	Tue 2/22/11
141		**OU40**		**Source ID Fieldwork LPA**	**458 days**	**Tue 10/12/10**	**Tue 7/31/12**
142		**OU40**		**County ROW permits**	**439 days**	**Thu 11/4/10**	**Fri 7/27/12**
143		**OU40**		**ROW Permits for LPA-MW05, -MW22 and -MW23**	**293 days**	**Thu 11/4/10**	**Tue 1/3/12**
144	✓	OU40		Submit to AA County	1 day	Thu 11/4/10	Thu 11/4/10
145	✓	OU40		Receive AA County signature	1 day	Fri 11/12/10	Fri 11/12/10
146	✓	OU40		Submit to Army	1 day	Mon 11/15/10	Mon 11/15/10
147		OU40		Receive Army signature	285 days	Tue 11/16/10	Tue 1/3/12
148		**OU40**		**ROW Permits for Round 2 LPA Wells**	**81 days**	**Wed 4/4/12**	**Fri 7/27/12**

ID	Phase Number WBS	Task Number WBS	Task Name	Duration	Start	Finish
149	OU40		Submit to AA County	1 day	Wed 4/4/12	Wed 4/4/12
150	OU40		Receive AA County signature	22 days	Thu 4/12/12	Fri 5/11/12
151	OU40		Submit to Army	1 day	Mon 5/14/12	Mon 5/14/12
152	OU40		Receive Army signature	42 days	Wed 5/30/12	Fri 7/27/12
153	**OU40**		**Public Notification**	**458 days**	**Tue 10/12/10**	**Tue 7/31/12**
154	**OU40**		**Odenton/LPA Drilling Fact Sheet #1 (LPA-MW05, -MW22**	**458 days**	**Tue 10/12/10**	**Tue 7/31/12**
155	OU40		Submit fact sheet and timeline to Army	1 day	Tue 10/12/10	Tue 10/12/10
156	OU40		Army review and comment	19 days	Wed 10/13/10	Mon 11/8/10
157	OU40		ARCADIS revisions	45 days	Mon 11/8/10	Thu 1/13/11
158	OU40		Army review and comment	1 day	Thu 1/13/11	Thu 1/13/11
159	OU40		ARCADIS revisions	4 days	Thu 1/13/11	Tue 1/18/11
160	OU40		Army review and comment	2 days	Tue 1/18/11	Wed 1/19/11
161	OU40		ARCADIS revisions	1 day	Wed 1/19/11	Wed 1/19/11
162	OU40		Provide fact sheet to EPA/MDE/AACo DoH	1 day	Mon 1/31/11	Mon 1/31/11
163	OU40		EPA/MDE acceptance of fact sheet	2 days	Wed 2/2/11	Thu 2/3/11
164	OU40		Produce fact sheet	1 day	Mon 7/30/12	Mon 7/30/12
165	OU40		Distribute fact sheet door to door to residents within 1 b	1 day	Tue 7/31/12	Tue 7/31/12
166	**OU40**		**Odenton/LPA Drilling Fact Sheet #2 (LPA-MW04 and -MW**	**15 days**	**Mon 5/14/12**	**Mon 6/4/12**
167	OU40		Submit fact sheet to Army	1 day	Mon 5/14/12	Mon 5/14/12
168	OU40		Army review and comment	5 days	Tue 5/15/12	Mon 5/21/12
169	OU40		ARCADIS revisions	1 day	Tue 5/22/12	Tue 5/22/12
170	OU40		Army review	2 days	Wed 5/23/12	Thu 5/24/12
171	OU40		Army approval	0 days	Thu 5/24/12	Thu 5/24/12
172	OU40		Provide fact sheet to EPA/MDE/AACo DoH	1 day	Fri 5/25/12	Fri 5/25/12
173	OU40		Produce fact sheet	1 day	Fri 6/1/12	Fri 6/1/12
174	OU40		Distribute fact sheet door to door to residents within 1 b	1 day	Mon 6/4/12	Mon 6/4/12
175	**OU40**		**Mobilize**	**181 days**	**Wed 1/18/12**	**Mon 10/1/12**
176	**OU40**		**Fieldwork for 125d and 126d source identification (Phase 2)**	**151 days**	**Wed 1/18/12**	**Fri 8/17/12**
177	OU40		Mobilize	5 days	Wed 1/18/12	Tue 1/24/12
178	**OU40**		**LPA Wells - Rotosonic Boring**	**146 days**	**Wed 1/25/12**	**Fri 8/17/12**
179	**OU40**		**SB-52**	**5 days**	**Wed 1/25/12**	**Tue 1/31/12**
180	OU40		Drilling and Sampling	3 days	Wed 1/25/12	Fri 1/27/12
181	OU40		Laboratory Analysis	3 days	Thu 1/26/12	Mon 1/30/12
182	OU40		Monitoring Well Construction	1 day	Tue 1/31/12	Tue 1/31/12
183	**OU40**		**SB-53**	**5 days**	**Wed 2/1/12**	**Tue 2/7/12**
184	OU40		Drilling and Sampling	3 days	Wed 2/1/12	Fri 2/3/12
185	OU40		Laboratory Analysis	3 days	Thu 2/2/12	Mon 2/6/12
186	OU40		Monitoring Well Construction	1 day	Tue 2/7/12	Tue 2/7/12
187	**OU40**		**LPA-MW No. 1**	**15 days**	**Wed 2/8/12**	**Tue 2/28/12**
188	OU40		Drilling and Sampling	3 days	Wed 2/8/12	Fri 2/10/12
189	OU40		Laboratory Analysis	3 days	Thu 2/9/12	Mon 2/13/12
190	OU40		Monitoring Well Construction	1 day	Tue 2/14/12	Tue 2/14/12

ID	Phase Number WBS	Task Number WBS	Task Name	Duration	Start	Finish
191	**OU40**		**LPA-MW No. 2**	**5 days**	**Wed 2/15/12**	**Tue 2/21/12**
192	OU40		Drilling and Sampling	3 days	Wed 2/15/12	Fri 2/17/12
193	OU40		Laboratory Analysis	3 days	Thu 2/16/12	Mon 2/20/12
194	OU40		Monitoring Well Construction	1 day	Tue 2/21/12	Tue 2/21/12
195	**OU40**		**LPA-MW No. 3**	**5 days**	**Wed 2/22/12**	**Tue 2/28/12**
196	OU40		Drilling and Sampling	3 days	Wed 2/22/12	Fri 2/24/12
197	OU40		Laboratory Analysis	3 days	Thu 2/23/12	Mon 2/27/12
198	OU40		Monitoring Well Construction	1 day	Tue 2/28/12	Tue 2/28/12
199	OU40		Planning and Permitting Hiatus	7 days	Thu 7/19/12	Fri 7/27/12
200	**OU40**		**LPA-MW No. 4**	**5 days**	**Mon 7/30/12**	**Fri 8/3/12**
201	OU40		Drilling and Sampling	3 days	Mon 7/30/12	Wed 8/1/12
202	OU40		Laboratory Analysis	3 days	Tue 7/31/12	Thu 8/2/12
203	OU40		Monitoring Well Construction	1 day	Fri 8/3/12	Fri 8/3/12
204	**OU40**		**LPA-MW No. 5**	**5 days**	**Mon 8/6/12**	**Fri 8/10/12**
205	OU40		Drilling and Sampling	3 days	Mon 8/6/12	Wed 8/8/12
206	OU40		Laboratory Analysis	3 days	Tue 8/7/12	Thu 8/9/12
207	OU40		Monitoring Well Construction	1 day	Fri 8/10/12	Fri 8/10/12
208	**OU40**		**LPA-MW No. 6**	**5 days**	**Mon 8/13/12**	**Fri 8/17/12**
209	OU40		Drilling and Sampling	3 days	Mon 8/13/12	Wed 8/15/12
210	OU40		Laboratory Analysis	3 days	Tue 8/14/12	Thu 8/16/12
211	OU40		Monitoring Well Construction	1 day	Fri 8/17/12	Fri 8/17/12
212	OU40		Demobilization	5 days	Mon 8/20/12	Fri 8/24/12
213	**OU40**		**Groundwater Sampling & Lab Analysis**	**20 days**	**Tue 9/4/12**	**Mon 10/1/12**
214	OU40		Field Work	5 days	Tue 9/4/12	Mon 9/10/12
215	OU40		Laboratory Analysis	15 days	Tue 9/11/12	Mon 10/1/12
216	**OU40**	**DP001**	**Source Identification Report 125d and 126d**	**126 days**	**Tue 9/4/12**	**Mon 3/4/13**
217	OU40		Prepare Draft	22 days	Tue 9/4/12	Wed 10/3/12
218	OU40		Army Review	15 days	Thu 10/4/12	Wed 10/24/12
219	OU40		Prepare Draft Final	15 days	Thu 10/25/12	Wed 11/14/12
220	OU40		MDE Review	22 days	Thu 11/15/12	Tue 12/18/12
221	OU40		EPA Review	42 days	Thu 11/15/12	Thu 1/17/13
222	OU40		Comment Resolution	22 days	Fri 1/18/13	Mon 2/18/13
223	OU40		Approved Source Identification Report	10 days	Tue 2/19/13	Mon 3/4/13
224	**OU40**	**EA001**	**Remedial Investigation/Feasibility Study**	**126 days**	**Tue 9/4/12**	**Mon 3/4/13**
225	OU40		Final addressing previous EPA/MDE Comments	22 days	Tue 9/4/12	Wed 10/3/12
226	OU40		Army Review	15 days	Thu 10/4/12	Wed 10/24/12
227	OU40		Draft Final	15 days	Thu 10/25/12	Wed 11/14/12
228	OU40		MDE Review	22 days	Thu 11/15/12	Tue 12/18/12
229	OU40		EPA Review	42 days	Thu 11/15/12	Thu 1/17/13
230	OU40		Comment Resolution (Final)	22 days	Fri 1/18/13	Mon 2/18/13
231	OU40		Approved RI/FS	10 days	Tue 2/19/13	Mon 3/4/13
232	**OU40**	**IA001**	**Proposed Plan**	**131 days**	**Fri 1/18/13**	**Tue 7/23/13**

ID	Phase Number WBS	Task Number WBS	Task Name	Duration	Start	Finish
233	OU40		Draft	15 days	Fri 1/18/13	Thu 2/7/13
234	OU40		Army Review	15 days	Fri 2/8/13	Thu 2/28/13
235	OU40		Draft Final	5 days	Fri 3/1/13	Thu 3/7/13
236	OU40		MDE Review	22 days	Fri 3/8/13	Mon 4/8/13
237	OU40		EPA Review	42 days	Fri 3/8/13	Mon 5/6/13
238	OU40		Comment Resolution	22 days	Tue 5/7/13	Thu 6/6/13
239	OU40		Prepare Final	10 days	Fri 6/7/13	Thu 6/20/13
240	OU40		Approved Proposed Plan	0 days	Thu 6/20/13	Thu 6/20/13
241	OU40		Public Meeting	1 day	Mon 7/8/13	Mon 7/8/13
242	OU40		Public Comment Period	22 days	Fri 6/21/13	Tue 7/23/13
243	**OU40**	**IC001**	**Decision Document**	**146 days**	**Tue 5/7/13**	**Tue 12/3/13**
244	OU40		Draft	10 days	Tue 5/7/13	Mon 5/20/13
245	OU40		Army Review	15 days	Tue 5/21/13	Tue 6/11/13
246	OU40		Draft Final	10 days	Wed 6/12/13	Tue 6/25/13
247	OU40		MDE Review	22 days	Wed 6/26/13	Fri 7/26/13
248	OU40		EPA Review	42 days	Wed 6/26/13	Fri 8/23/13
249	OU40		Comment Resolution	22 days	Mon 8/26/13	Wed 9/25/13
250	OU40		Final	10 days	Thu 9/26/13	Wed 10/9/13
251	OU40		Army Signature	15 days	Thu 10/10/13	Wed 10/30/13
252	OU40		EPA Legal and Signature	22 days	Thu 10/31/13	Tue 12/3/13
253	OU40		Signed DD	0 days	Tue 12/3/13	Tue 12/3/13
254	**OU40**	**RIP01**	**RIP OU-4/LPA (Option)**	**1103 days**	**Mon 8/26/13**	**Fri 12/29/17**
255	**OU40**		**Remedial Design**	**120 days**	**Mon 8/26/13**	**Fri 2/14/14**
256	OU40		Draft	25 days	Mon 8/26/13	Mon 9/30/13
257	OU40		Army Review	15 days	Tue 10/1/13	Mon 10/21/13
258	OU40		Draft Final	15 days	Tue 10/22/13	Mon 11/11/13
259	OU40		MDE Review	33 days	Tue 11/12/13	Tue 12/31/13
260	OU40		EPA Review	33 days	Tue 11/12/13	Tue 12/31/13
261	OU40		Comment resolution	22 days	Thu 1/2/14	Fri 1/31/14
262	OU40		Final	10 days	Mon 2/3/14	Fri 2/14/14
263	OU40		Approved RD	0 days	Fri 2/14/14	Fri 2/14/14
264	**OU40**		**Remedial Action**	**70 days**	**Mon 2/3/14**	**Fri 5/9/14**
265	OU40		Mobilization	5 days	Mon 2/3/14	Fri 2/7/14
266	OU40		Implement RA	60 days	Mon 2/10/14	Fri 5/2/14
267	OU40		Demobilization	5 days	Mon 5/5/14	Fri 5/9/14
268	**OU40**		**Interim Remedial Action Report**	**102 days**	**Mon 5/12/14**	**Fri 10/3/14**
269	OU40		Draft	25 days	Mon 5/12/14	Mon 6/16/14
270	OU40		Army Review	15 days	Tue 6/17/14	Tue 7/8/14
271	OU40		Draft Final	10 days	Wed 7/9/14	Tue 7/22/14
272	OU40		MDE Review	22 days	Wed 7/23/14	Thu 8/21/14
273	OU40		EPA Review	42 days	Wed 7/23/14	Fri 9/19/14
274	OU40		Final	10 days	Mon 9/22/14	Fri 10/3/14

ID	Phase Number WBS	Task Number WBS	Task Name	Duration	Start	Finish
275	OU40		Approved IRAR (RIP for OU-4GW and RIP LPA/125d/126d)	0 days	Fri 10/3/14	Fri 10/3/14
276	**OU40**	**MD001**	**LTO/LTM**	**923 days**	**Mon 5/12/14**	**Fri 12/29/17**
277	**OU40**		**Year 1**	**234 days**	**Mon 5/12/14**	**Mon 4/13/15**
278	OU40		LTO/LTM	162 days	Mon 5/12/14	Wed 12/31/14
279	**OU40**		**Annual Report**	**72 days**	**Fri 1/2/15**	**Mon 4/13/15**
280	OU40		Draft	20 days	Fri 1/2/15	Thu 1/29/15
281	OU40		Army Review	15 days	Fri 1/30/15	Thu 2/19/15
282	OU40		Draft Final	5 days	Fri 2/20/15	Thu 2/26/15
283	OU40		MDE Review	22 days	Fri 2/27/15	Mon 3/30/15
284	OU40		EPA Review	22 days	Fri 2/27/15	Mon 3/30/15
285	OU40		Final	10 days	Tue 3/31/15	Mon 4/13/15
286	OU40		Approved	0 days	Mon 4/13/15	Mon 4/13/15
287	**OU40**	**MD002**	**Year 2**	**326 days**	**Fri 1/2/15**	**Tue 4/12/16**
297	**OU40**	**MD003**	**Year 3**	**254 days**	**Mon 1/4/16**	**Fri 12/30/16**
307	**OU40**	**MD004**	**Year 4**	**253 days**	**Tue 1/3/17**	**Fri 12/29/17**
317	**AOC0**		**FGGM-74 - Architect of the Capitol**	**1868 days**	**Wed 8/26/09**	**Thu 12/29/16**
318	**AOC0**	**DA001**	**Remedial Investigation**	**645 days**	**Wed 8/26/09**	**Tue 3/6/12**
319	**AOC0**		**Workplan**	**287 days**	**Wed 8/26/09**	**Wed 10/6/10**
320	AOC0		RI WP Draft--Determine arsenic issues	112.1 days	Wed 8/26/09	Fri 5/14/10
321	AOC0		RI WP for lead hotspots - Internal Draft	63 days	Tue 3/2/10	Fri 5/28/10
322	AOC0		ROE (Negotiate Access)	20.76 days	Mon 8/16/10	Wed 10/6/10
323	AOC0		Army Review	66.46 days	Fri 5/28/10	Wed 9/1/10
324	AOC0		RI WP Draft	10 days	Tue 7/6/10	Mon 7/19/10
325	AOC0		MDE review	3 days	Mon 9/20/10	Wed 9/22/10
326	AOC0		EPA review	2 days	Mon 9/20/10	Tue 9/21/10
327	AOC0		Comment Resolution	15 days	Mon 8/23/10	Mon 9/13/10
328	AOC0		Final Work Plan	1 day	Tue 9/14/10	Tue 9/14/10
329	**AOC0**		**RI Fieldwork (Round 1)**	**2 days**	**Mon 11/22/10**	**Tue 11/23/10**
330	AOC0		RI Field Work	2 days	Mon 11/22/10	Tue 11/23/10
331			**RI Fieldwork (Round 2)**	**107 days**	**Fri 1/7/11**	**Tue 6/7/11**
332			RI WP Review and Approval	86 days	Fri 1/7/11	Fri 5/6/11
333			Field work	2 days	Mon 6/6/11	Tue 6/7/11
334	**AOC0**		**RI Report**	**129 days**	**Thu 9/1/11**	**Tue 3/6/12**
335	AOC0		RI Risk Review	20 days	Thu 9/1/11	Thu 9/29/11
336	AOC0		Draft-Final RI	20 days	Fri 9/30/11	Thu 10/27/11
337	AOC0		Army Review	15 days	Fri 10/28/11	Thu 11/17/11
338	AOC0		MDE Review	22 days	Fri 11/18/11	Wed 12/21/11
339	AOC0		EPA Review	42 days	Fri 11/18/11	Fri 1/20/12
340	AOC0		Comment Resolution	22 days	Mon 1/23/12	Tue 2/21/12
341	AOC0		Approved RI	10 days	Wed 2/22/12	Tue 3/6/12
342	**AOC0**	**EA001**	**Feasibility Study**	**99 days**	**Mon 1/23/12**	**Fri 6/8/12**
343	AOC0		Draft	20 days	Mon 1/23/12	Fri 2/17/12

ID	Phase Number WBS	Task Number WBS	Task Name	Duration	Start	Finish
344	AOC0		Army Review	15 days	Mon 2/20/12	Fri 3/9/12
345	AOC0		Draft Final	10 days	Mon 3/12/12	Fri 3/23/12
346	AOC0		MDE Review	22 days	Mon 3/26/12	Tue 4/24/12
347	AOC0		EPA Review	42 days	Mon 3/26/12	Tue 5/22/12
348	AOC0		Comment Resolution	22 days	Wed 4/25/12	Thu 5/24/12
349	AOC0		Final	10 days	Fri 5/25/12	Fri 6/8/12
350	AOC0		Approved FS	0 days	Fri 6/8/12	Fri 6/8/12
351	**AOC0**	**IA001**	**Proposed Plan**	**131 days**	**Wed 5/23/12**	**Wed 11/28/12**
352	AOC0		Draft	15 days	Wed 5/23/12	Wed 6/13/12
353	AOC0		Army Review	15 days	Thu 6/14/12	Thu 7/5/12
354	AOC0		Draft Final	5 days	Fri 7/6/12	Thu 7/12/12
355	AOC0		MDE Review	22 days	Fri 7/13/12	Mon 8/13/12
356	AOC0		EPA Review	42 days	Fri 7/13/12	Tue 9/11/12
357	AOC0		Final	10 days	Wed 9/12/12	Tue 9/25/12
358	AOC0		Comment Resolution	22 days	Wed 9/26/12	Thu 10/25/12
359	AOC0		Approved Proposed Plan	0 days	Thu 10/25/12	Thu 10/25/12
360	AOC0		Public Meeting	1 day	Fri 11/9/12	Fri 11/9/12
361	AOC0		Public Comment Period	22 days	Fri 10/26/12	Wed 11/28/12
362	**AOC0**	**IC001**	**Decision Document**	**151 days**	**Wed 9/12/12**	**Tue 4/16/13**
363	AOC0		Draft	15 days	Wed 9/12/12	Tue 10/2/12
364	AOC0		Army Review	15 days	Wed 10/3/12	Tue 10/23/12
365	AOC0		Draft Final	10 days	Wed 10/24/12	Tue 11/6/12
366	AOC0		MDE Review	22 days	Wed 11/7/12	Mon 12/10/12
367	AOC0		EPA Review	42 days	Wed 11/7/12	Wed 1/9/13
368	AOC0		Comment Resolution	22 days	Thu 1/10/13	Fri 2/8/13
369	AOC0		Final	10 days	Mon 2/11/13	Fri 2/22/13
370	AOC0		Army Signature	15 days	Mon 2/25/13	Fri 3/15/13
371	AOC0		EPA Legal and Signature	22 days	Mon 3/18/13	Tue 4/16/13
372	AOC0		Signed DD	0 days	Tue 4/16/13	Tue 4/16/13
373	**AOC0**	**HG001**	**Remedial Design**	**124 days**	**Wed 11/7/12**	**Fri 5/3/13**
374	AOC0		Draft	15 days	Wed 11/7/12	Thu 11/29/12
375	AOC0		Army Review	15 days	Fri 11/30/12	Thu 12/20/12
376	AOC0		Draft Final	14 days	Fri 12/21/12	Fri 1/11/13
377	AOC0		MDE Review	22 days	Mon 2/11/13	Tue 3/12/13
378	AOC0		EPA Review	33 days	Mon 2/11/13	Wed 3/27/13
379	AOC0		Comment Resolution	22 days	Thu 3/28/13	Fri 4/26/13
380	AOC0		Final	5 days	Mon 4/29/13	Fri 5/3/13
381	AOC0		Approved RD	0 days	Fri 5/3/13	Fri 5/3/13
382	**AOC0**	**KG001**	**Remedial Action**	**12 days**	**Mon 1/14/13**	**Tue 1/29/13**
383	AOC0		Mobilization	1 day	Mon 1/14/13	Mon 1/14/13
384	AOC0		Implement RA	10 days	Tue 1/15/13	Mon 1/28/13
385	AOC0		Demobilization	1 day	Tue 1/29/13	Tue 1/29/13

ID	Phase Number WBS	Task Number WBS	Task Name	Duration	Start	Finish
386	**AOC0**	**KK001**	**Remedial Action Report**	**102 days**	**Wed 1/30/13**	**Fri 6/21/13**
387	AOC0		Draft	20 days	Wed 1/30/13	Tue 2/26/13
388	AOC0		Army Review	15 days	Wed 2/27/13	Tue 3/19/13
389	AOC0		Draft Final	15 days	Wed 3/20/13	Tue 4/9/13
390	AOC0		MDE Review	22 days	Wed 4/10/13	Thu 5/9/13
391	AOC0		EPA Review	42 days	Wed 4/10/13	Fri 6/7/13
392	AOC0		Final	10 days	Mon 6/10/13	Fri 6/21/13
393	AOC0		Approved RAR (GW RIP and SL RC)	0 days	Fri 6/21/13	Fri 6/21/13
394	**AOC0**	**MD001**	**LTO/LTM**	**306 days**	**Wed 1/30/13**	**Fri 4/11/14**
395	**AOC0**		**Year 1**	**306 days**	**Wed 1/30/13**	**Fri 4/11/14**
396	AOC0		LTO/LTM	234 days	Wed 1/30/13	Tue 12/31/13
397	**AOC0**		**Annual Report**	**72 days**	**Thu 1/2/14**	**Fri 4/11/14**
398	AOC0		Draft	20 days	Thu 1/2/14	Wed 1/29/14
399	AOC0		Army Review	15 days	Thu 1/30/14	Wed 2/19/14
400	AOC0		Draft Final	5 days	Thu 2/20/14	Wed 2/26/14
401	AOC0		MDE Review	22 days	Thu 2/27/14	Fri 3/28/14
402	AOC0		EPA Review	22 days	Thu 2/27/14	Fri 3/28/14
403	AOC0		Final	10 days	Mon 3/31/14	Fri 4/11/14
404	AOC0		Approved	0 days	Fri 4/11/14	Fri 4/11/14
405	**AOC0**	**MD002**	**Year 2**	**326 days**	**Thu 1/2/14**	**Mon 4/13/15**
415	**AOC0**	**MD003**	**Year 3**	**326 days**	**Fri 1/2/15**	**Tue 4/12/16**
425	**AOC0**	**MD004**	**Year 4**	**253 days**	**Mon 1/4/16**	**Thu 12/29/16**

Table 3-3: PA/SI AOI Summary by Geographic Area

North

Building 1007 – Army Reserves MP

Building 1251 – Administrative and Vehicle and Equipment Storage (SWMUs 19-21)

Building 2120c – Vehicle Storage and Maintenance (SWMUs 25-28)

Building 2123 – Tent/Jeep Storage (SWMU 32)

Building 2124 – Vehicle and Tool Storage, Vehicle Maintenance (SWMUs 33-34)

Building 2724 – Outdoor Recreation Equipment Rentals, WR (SWMUs 80-86)

Building 2728 – Out of Service WRs and Recreational Equipment Storage (SWMUs 87-92, 148)

Building 2804 (SWMU 94)

Building 2805 (SWMU 95)

Building 3000 SWMU 98

Building 940 – MP and Associated WR and OWS (SWMUs 12, 13, 146)

Building 9581 (SWMU 138)

Former Building 2121 – Vehicle Maintenance (SWMUs 29, 30)

Former Building 2122 – Vehicle Maintenance (SWMU 31)

Former Building 2128– Vehicle Maintenance (SWMU 35, 36)

Former Incinerator Building - 1943

MP-11/WR-7

MP-12/WR-8

MP-13/WR-9

MP-14

MP-17

MP-18/WR-12

MP-19/WR-13

Possible Dump Site A – 1957

Possible Dump Site B – 1957

Possible Dump Site C – 1957

Possible Dump Site D – 1957

Possible Dump Site E – 1957 (Former Burning Waste Site)

Possible Dump Site F – 1957

Possible Dump Sites – 1970

Small Pit – 1952

Southeast

Building 2213 (SWMU 38) – Sheet Metal and Sign Fabrication Shop

Building 2227 (SWMU 43, 44, and 147) and Building 2224

Building 2276 SWMUs 63 and 64

Building 2287 – NSA MP Storing Equipment and Chemicals (Demolished 2000)

Building 2288 (SWMU 69)

Building 2482 – Used Oil Recycling Tank at Hospital Boiler Plant

Building 2484 (SWMU 73)

Building 2490 (SWMU 74)

Building 2501

Building 2630 – Dispatch, Storage, and Parking Area for Emergency Medical Units WR

Building 2801 (non-SWMU 5)

Building 2802 (SWMU 93)

Building 294 (SWMU 10)

Building 4272 (non-SWMU 9)

Building 4411 (SWMU 99)

Building 4552 (non-SWMU 10)

Building 4553 (non-SWMU 11)

Building 546 (SWMU 11)

Buildings 2454, 2455, 2456, and 2457 (non-SWMUs 1, 2, 3, 4)

Buildings 2810, 2811, 2832 (non-SWMUs 6, 7, 8)

Chisholm Ave and 6th Street

Debris and Stain – 1975

FGGM 08 (OU-7)

FGGM 11 (OU-9)

FGGM 37 (OU-21)

FGGM 45 (OU-22)

FGGM 51 (OU-24)

Former Building 2831 (SWMUs 96 & 97)

Former MP-10

MP-6

MP-7/WR-6
MP-8
MP-9
Possible Vehicle Service Area A – 1943
Possible Vehicle Service Area B – 1943
Pre-WWII Laundry
Stained Soils Along 3rd Street
SWMUs 143 and 144
WR-5
Waste Storage/Disposal Area – 1938

Southwest

Building 4554 (SWMU 100)
Building 4587 – Equipment Storage and Vehicle Repair Shop and WR
Building 4680 – Gas Station and Detailing Shop
Building 6527 (SWMU 104)
Building 6530 (SWMUs 105-108)
Building 8472 (SWMU 109)
Building 8480 – Military Vehicle and Equipment Storage
Building 8485 – Military Vehicle and Equipment Storage
Building 8486 (SWMU 117 & 118)
Building 8486 – MP
Building 8487 – MP
Building 8549 (SWMUs 121 and 122) – Practice Hall and Instrument Storage for Musicians
Building 8550 – MP
Building 8551 – Maintenance Facility with WR and OWS
Buildings 9802 and 9803 (non-SWMUs 12 and 13)
Buried Drum Site – Taylor Avenue
FGGM 03 (OU-6)
FGGM 33 (OU-19)
FGGM 70 (OU-25)
FGGM 71 (OU-26)
Fill – 1988
IAL4
MP-1/WR-4
MP-2
MP-3/WR-2
MP-4
MP-5
Oil Tanks
Possible Dump Site G – 1957
Possible Vehicle Storage Area – 1957
SWMUs 123 and 124 – WR and OWS near Building 8549
SWMUs 141 and 142 – Privately Owned Vehicles WR
WR-3

BRAC/ Off- Base / Others

Building 2266
FGGM 14 (OU-11)
FGGM 18 (OU-13)
FGGM 19 (OU-14)
FGGM 21 (OU-16)
FGGM 32 (OU-18)
FGGM 72 (OU-27)
FGGM 73 (OU-28)
FGGM 75 (OU-30) – USTs Prior to 1984
FGGM 80 (OU-32)
FGGM 82 (OU-34)

4.0 References

685th Engineer Company, 1942. Map of Fort George G. Meade, Maryland. Compiled from data furnished by the Post Utilities Office. June 1942.

Anon, 1952. Anonymous 1952 map showing MP and wash rack locations among other features.

Arcadis, 2007. *Final Focused Feasibility Study (FFS) Fort George G. Meade, DRMO Site (FGGM-07, OU5)*. U.S. Army Environmental Command. Final, September 2007.

Arcadis, 2008. *Supplemental Plume Delineation and Data Collection Plan Fort George G. Meade, DRMO Site (FGGM-07, OU5)*. U.S. Army Environmental Command. Draft Final, September 2008.

Army Map Services, 1922. *Terrain Map Maryland Fort George G. Meade and Vicinity*. Army Map Services, U.S. Army, Washington, D.C.

Arthur D Little, Inc. (AD Little) 1999. *Active Sanitary Landfill Atrazine Study and Remedial Investigation/Site Inspection, Fort George G. Meade, Maryland*. Prepared for U.S. Army Environmental Center and U.S. Army Corps of Engineers. Final Document. March 1999.

BCM Engineers Inc., 1996. *Solid Waste Management Unit Study, Department of Army Headquarters, Fort George G. Meade Director of Public Works, A-E Contract No. DAC31-93-3-0073, Delivery Order 0006.* Draft Final Report. 361 pp. June 1996.

Berger EA, 2004. *Final Environmental Baseline Survey, Site M, Fort Meade*. Prepared for the National Security Agency (NSA). May 2004.

Camp Meade, 1923. *Special Military Map, 17th Engineers, U.S.A., Maryland, Camp Meade.* Engineer Reproduction Plant, US Army, Washington Barracks, D.C. 5038. Surveyed 1923.

Camp Meade, 1934. *Special Military Map 2654:6442:/55, 17th Engineers, U.S.A., Maryland, Camp Meade, Grid Zone "A."* Engineer Reproduction Plant, US Army, Washington Barracks, D.C. 5038. Surveyed 1923, updated 1934.

Cao, Xinde, L.O. MA, M. Chen, D.W. Hardison, Jr., and W.G. Harris, 2003. Weathering of Lead Bullets and Their Environmental Effects at Outdoor Shooting Ranges, Journal of Environmental Quality, Vol. 32, pp 526-534.

CH2M Hill, 1999. *RCRA Facility Assessment – Third Phase, Sampling Visits Report, Ft. George G. Meade, Fort Meade, Maryland*, Draft Final Document, 1095 pp. December 1999.

CH2MHILL. 2001. *Annual and Semiannual Detection and Assessment Monitoring Reports for the Fort Meade Municipal Solid Waste Landfill Groundwater and Surface Water Monitoring Program.* Prepared for the Fort Meade Environmental Management Office and the U.S. Corps of Engineers, Baltimore District. February 1996 through February 2001 [11 documents].

Dames & Moore, 1990. *Work Plan, Phoenix Military Reservation, Monitoring - II Jacksonville, Maryland.* Draft Final Document, 135 pp.

Dames & Moore, 2000a. *Phase IIB Groundwater Investigation, Covered Storage Facility/Former DPDO Salvage Yard*, 2000.

Dames & Moore, 2000b. *Draft Summary Report, Phase IIIB Groundwater Investigation, Covered Storage Facility/Former DPDO Salvage Yard, Fort Meade, Maryland*, January 2000.

Defense Mapping Agency, 1976. Fort George G Meade 1:25,000 Special Topographic Map. Series V833S, Edition 1-DMA.

EA Engineering Science and Technology, Inc., 1990a. *Technical and Sampling/Analysis Plan for 9,000-Acre Ease Closure Parcel at Fort George G. Meade.* Draft Final Document, 126 pp.

EA Engineering Science and Technology, Inc., 1990b. *Draft Technical and Sampling/Analysis Plan for 9,000-Acre Base Closure Parcel at Fort George G. Meade*. February 1990.

EA Engineering Science and Technology, Inc., 1992a. *Draft Site Inspection for Ordnance Demolition Area*.

EA Engineering Science and Technology, Inc., 1992b. Final Fort George G. Meade Base Closure Parcel Site Inspection Study. October 1992.

EA Engineering Science and Technology, Inc., 1993. *Site Characterization and Remediation of Former Battery Disposal Facility, Fort Meade, Odenton, Maryland*. Draft Final Document, 79 pp. May 1994 (Draft dated December 1993).

EA Engineering Science and Technology, Inc., 1994. *Final Site Characterization and Remediation of Former Battery Disposal Facility, Fort Meade, Maryland.* Draft Final Document, 73 pp.

EA Engineering Science and Technology, Inc., 1996. *Evaluation of Bldg 8481 Groundwater Treatment/Product Recovery System, Fort George G. Meade, MD.* 80 pp.

Ecology and Environment, Inc., 1995. Final Site Inspection Report, Medical Waste Site, Patuxent Wildlife Research Center (Formerly Fort George G. Meade), Anne Arundel County, Maryland, August 1995.

EM Federal Corp., 2003a. *Closed Sanitary Landfill Draft Groundwater Data Report*, Fort Meade, MD. Draft Document, 298 pp. July, 2003.

EM Federal Corp., 2003b. *Fort George G. Meade Closed Sanitary Landfill*. Draft Final Document, 188 pp. July 2003.

EM Federal Corp., 2003c. *Fort George G. Meade, Generic Field Sampling Plan.* Draft Final Document, 274 pp.

EM Federal Corp., 2003d. *Fort George G. Meade, Generic Quality Assurance Plan (A).* Draft Final Document, 207 pp.

EM Federal Corp., 2003e. *Fort George G. Meade, Generic Quality Assurance Plan (B).* Draft Final Document, 207 pp.

EM Federal Corp., 2003f. *Fort George G. Meade, Generic Site Safety and Health Plan (B).* Draft Final Document, 567 pp.

EM Federal Corp., 2004. *Working Draft Site Management Plan, Fort George G. Meade, Fort Meade, Maryland*. July 2004.

EM Federal Corp., 2007. *Groundwater Remedial Investigation, Closed Sanitary Landfill, FGGM-17, Final, August, 2007.*

Environmental Protection Agency (EPA), 1980. Enforcement Consideration for Evaluation of Uncontrolled Hazardous Waste Disposal Sites by Contractors, Draft, April 1980.

EPA, 1981 Technical Method for Investigating Sites Containing Hazardous Substances, Technical Monograph No. 27, Draft, June 1981.

EPA, 1988. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, Interim Final. Office of Emergency and Remedial Response, EPA/540/G-89/004OSWER, Directive 9355.3-01

EPA, December 1989. Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual, Part A, Interim Final. Office of Emergency and Remedial Response, Washington, C.C., EPA 540/1-89/002.

EPA, March 1991. Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual Supplemental Guidance Standard Default Exposure Factors, Interim Final. Office of Emergency and Remedial Response. OSWER 9285.6-03.

EPA, May 1992. Supplemental Guidance to RAGS, Office of Solid Waste and Emergency Response, PB9285.7-081.

EPA, 1996. Aerial Photographic Analysis, Fort George Meade - Cantonment Area, Anne Arundel County, Maryland, March 1996.

EPA, August 1997a. Exposure Factors Handbook Volume I General Factors. Office of Research and Development, Washington, C.C., EPA/600/P-95/002Fa.

EPA, August 1997b. Exposure Factors Handbook Volume II Food Ingestion Factors. Office of Research and Development, Washington, C.C., EPA/600/P-95/002Fb.

EPA, August 1997c. Exposure Factors Handbook Volume III Activity Factors. Office of Research and Development, Washington, C.C., EPA/600/P-95/002Fc.

EPA, 1998. EPA Superfund Record of Decision: Fort George G. Meade, Final Record of Decision, Tipton Airfield Area Operable Unit, OU 01, December 30, 1998. (Pertains to HHA, FTA and IAL3)

EPA, 1999a. EPA Superfund Record of Decision: Fort George G. Meade, Final Record of Decision, Tipton Airfield Parcel (TAP) Operable Unit, OU 02, June 1999. (Pertains to IAL1 and IAL2)

EPA, 1999b. "A Guide to Preparing Superfund Proposed Plans, Records of Decision, and other Remedy Selection Documents."; OSWER 9200.1-23p; EPA540-R-98-031, July 1999.

EPA, December 2001. Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual, Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments, Final, Publication 9285.7-47.

EPA, December 2002. Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. Office of Solid Wasted and Emergency Response, OSWER 9285.6-10

EPA, July 2004. Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual, Part E, Supplemental Guidance for Dermal Risk Assessment, Final, EPA/540/R/99/005.

EPA, 2008. United States Environmental Protection Agency Region III RCRA Section 7003 Unilateral Administrative Order (UAO), February 6 2008

EPA, 2009. *Regional Screening Level (RSL) Table*. Downloaded from EPA website in November 2009: http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm, December 23, 2009.

Environmental Science and Engineering, Inc., 1982a. *Plan for the Assessment of Contamination at Phoenix Military Reservation, Jacksonville, Maryland.* 108 pp.

Environmental Science and Engineering, Inc., 1982b. *Plan for the Assessment of Contamination at Phoenix Military Reservation, Jacksonville, Maryland.* 400 pp.

Environmental Science and Engineering, Inc., 1984. *Assessment of Contamination, Phoenix military Reservation, Launch Control Area.* Draft Final Document, 283 pp.

Fort Meade Environmental Partnership Tier I Meeting Summary, September 30, 2004.

Fort Meade, 1938. *Special Military Map, Fort George G. Meade, MD., Grid Zone "A."* Surveyed 1923, revised November 1938.

Fort Meade, 1998a. *Decision Document, Safety Precautions to be taken at Tipton Airfield, Fort George G. Meade, Maryland*, 9 July 1998.

Fort Meade, 1998b. *Decision Document Addendum, Safety Precautions to be taken at Tipton Airfield, Fort George G. Meade, Maryland*, November 6, 1998.

Fort Meade, 1998c. *Decision Document Addendum 2, Safety Precautions to be taken at Tipton Airfield, Fort George G. Meade, Maryland*, Unknown Date Issued/Effective.

Fort Meade, 2002. Fort Meade Master Plan. [As stated in Arcadis, 2007 reference].

Fort Meade, 2008a. *FY2008 Fort George G. Meade, Base Realignment & Closure, Installation Action Plan,* October 2008.

Fort Meade, 2008b. *FY2008 Fort George G. Meade, Compliance-Related Cleanup, Installation Action Plan,* October 2008.

Fort Meade, 2008c. *FY2008 Fort George G. Meade, Army Defense Environmental Restoration Program, Installation Action Plan,* October 2008.

Fort Meade, 2008d. *FY2008 Phoenix Military Reservation, Army Defense Environmental Restoration Program, Installation Action Plan,* October 2008.

HACA, 1999. *Public Health Assessment.* Final Document, 41 pp.

HCET, *Florida International University, Miami Public Research University and HCET.* 18 pp.

ICF Kaiser Engineers, Inc., 1998a. *Remedial Investigation Report for Inactive Landfills 1, 2, 3 and Clean Fill Dump*.

ICF Kaiser Engineers, Inc., 1998b. *Helicopter Hanger Area and Fire Training Area, Remedial Investigation Report*, October 1998.

IT Corp., 1994. *Fort George G. Meade Ordnance Survey (1400-Acre Parcel) Final Report.* Prepared for: US Army Environmental Center. June 1994.

IT Corp., 2001a. *Final Report of Results from May 2001 Sampling of Monitoring Well MW-4DR*. Draft Final Document, 56 pp. July 2001.

IT Corp., 2001b. *Groundwater Remedial Investigation Work Plan Addendum*. Draft Final Document, 169 pp. November 2001.

IT Group, 2002. *Fort George G. Meade, Remedial Investigation/Feasibility Study, Remedial Investigation Report, Ordnance Demolition Area, Final*, June 2002.

Kemron, 2007a. *Supplemental Testing of the Lead Concentrations in soil at Operable Unit 1 (OU-1) also known as FGGM-83 located at Fort Meade, Maryland, Letter Report,* September 14, 2007

Kemron, 2007b. *Revision 01, Draft Final Remedial Investigation/Feasibility Study Report for Operable Unit 4, FGGM-47, 86, 88, 89, 90, 91, and 92, Fort George G. Meade,* Prepared for USACE, December 2007

Kemron, 2008a. *Draft Final, Revision 01, Remedial Investigation and Feasibility Study Report for Operable Unit 3 (FGGM-87) Fort George G. Meade, Maryland.* Prepared for USAEC, January 24, 2008.

Kemron, 2008b. *Site Conceptual Model and Assessment Report for the Former Troop Housing Boiler Plant, Building 8481, Operable Unit 2, FGGM-05, Fort Meade, Maryland,* Prepared for USAEC. February 15, 2008.

Kemron, 2008c. *1st Quarter 2008 Status Report for the Former Troop Housing Boiler Plant, Building 8481, Operable Unit 2, FGGM-05, Fort Meade, Maryland,* Prepared for USAEC. April, 2008.

Kemron, 2008d. *Site Conceptual Model and Assessment Report for the Former Troop Housing Boiler Plant, Building 8481, Operable Unit 2, FGGM-05, Appendix A Work Plan, Fort Meade, Maryland: Addendum 1,* Prepared for USAEC. June 11, 2008.

Kemron, 2008e. *Summary of the April 2008 Groundwater Sampling Event at the Former Troop Housing Boiler Plant, Operable Unit 2 (FGGM-05), Fort Meade, Maryland.* Letter Report June 24, 2008. Amended draft document.

Kemron, 2008f.*Summary of the April 2008 Groundwater Sampling Event at the Former Troop Housing Boiler Plant, Operable Unit 2 (FGGM-05), Fort Meade, Maryland.* Letter Report July 02, 2008. Final document, revision 2.

Kemron, 2008g. *Addendum Number 2 to the Final Site Work Plan for Operable Unit 4, FGGM-47, 86, 88, 90, 91 and, 92, Fort Meade, Maryland. Prepared for USAEC,* November, 6 2008.

Kemron, 2008h. *Draft Final Addendum Number 3 to the Final Site Work Plan for Operable Unit 4, Fort George G. Meade, Maryland*, dated November 7, 2008.

Kemron, 2008i. *Draft Final Addendum Number 3 to the Final Site Work Plan for Operable Unit 3, FGGM-87, Fort Meade, Maryland.* Prepared for USAEC. November 7, 2008.

Kemron, 2008j. 2nd *Quarter 2008 Status Report for the Former Troop Housing Boiler Plant, Building 8481, Operable Unit 2, FGGM-05, Fort Meade, Maryland,* Prepared for USAEC. July, 2008.

Kemron, 2008k. *Draft Vapor Intrusion Evaluation Work Plan for Operable Unit 4, Fort George G. Meade, August 29, 2008.*

Kemron, 2008l. *Draft Final Site Specific Terrestrial Ecological Risk Assessment Field Study Work Plan, Operable Unit 1,* Draft Final*,* Prepared for USAEC. September 12, 2008.

Kemron, 2008m. 3rd *Quarter 2008 Status Report for the Former Troop Housing Boiler Plant, Building 8481, Operable Unit 2, FGGM-05, Fort Meade, Maryland,* Prepared for USAEC. October 17, 2008.

Kemron, 2008n. *Revision 03, Revised Final Memorandum, Human Health Risk Assessment, Former Trap and Skeet Range (FGGM-83), Operable Unit 1 (OU 1).* Prepared for USAEC, October 24, 2008.

Kemron, 2008o. *Draft Final Addendum Number 3 to the Final Site Work Plan for Operable Unit 3 (OU-3), FGGM-87, Fort Meade, MD*, Prepared for USAEC, November 12, 2008.

Kemron, 2009a. *4th Quarter 2008 Status Report for the former Troop Housing Boiler Plant, Building 8481, Operable Unit 2, FGGM-05, Fort Meade, Maryland*, Revision 00, Prepared for USAEC. January 19, 2009

Kemron, 2009b. *Draft Final Addendum #1 to the Project Work Plan Engineering Evaluation/Cost Analysis for OU-1,* December 2009*.*

Kemron, 2009c. *Draft Final Screening Level Ecological Risk Assessment, Nike Fire Control Site, FGGM-87, Operable Unit 3 (OU-3)*

Kemron, 2009d. *Final Addendum Number 3 to the Final Site Work Plan for Operable Unit 3 (OU-3), FGGM-87, Fort Meade, MD*, November 2009.

Kemron, 2009e. *Final Memorandum Human Health Risk Assessment, Revision 4,* September 2009.

Kemron, 2010a. *Draft Final Addendum Number 4 to the Final Site Work Plan for Operable Unit 3 (OU-3), FGGM-87, Fort Meade, MD*, May 2010.

Kemron, 2010b. *Final Addendum #1 to the Project Work Plan Engineering Evaluation/Cost Analysis for OU-1,* May 2010.Law Engineering Testing Co., 1986. *Investigation of Former Nike Missile Sites for Potential Toxic and Hazardous Waste Contamination, Vol. 1*. Final Document, 64 pp. March 1986.

Little, Arthur D., 1994. *Draft Site Inspection Addendum for Ordnance Demolition Area*.

Little, Arthur D., 1999a. *Off-Post Drilling and Sampling Results and Surface Water Sampling Results, Fort Meade Feasibility Study and Remedial Investigation/Site Inspection, Fort George G. Meade, Maryland*, Draft Final Document, 239 pp. March 1, 1999.

Little, Arthur D., 1999b. *Active Sanitary Landfill Atrazine Study, Fort Meade Feasibility Study and Remedial Investigation/Site Inspection, Fort George G. Meade, Maryland*, Draft Final Document, 111 pp. March 1999.

Louis Berger & Associates, Inc., 1999a. *Remedial Investigation/Focused Feasibility Study Report for The Phoenix Military Reservation Fire Control Area, Jacksonville, Maryland.* Draft Document 1, 138 pp.

Louis Berger & Associates, Inc., 1999b. *Remedial Investigation/Focused Feasibility Study Report for The Phoenix Military Reservation Fire Control Area, Jacksonville, Maryland.* Draft Document 2, 139 pp.

Mack, F.K., and Achmad, G., 1986. *Evaluation of the water-supply potential of the aquifers in the Potomac Group of Anne Arundel County, Maryland: Maryland Geological Survey Report of Investigations No. 46*. 111 pp.

Malcolm Pirnie, Inc., 1999. *Final Groundwater Database Report*. Draft Final Document, 312 pp. March 1, 1999.

Malcolm Pirnie, Inc., 2000a. *Field Sampling Plan Part 1: Remedial Investigation, Library of Congress Campus Facility, Fort George G. Meade, MD*. Revised Final Work Plan, 68 pp.

Malcolm Pirnie, Inc., 2000b. *Quality Assurance Project Plan Part 2: Remedial Investigation, Library of Congress Campus Facility, Fort George G. Meade, MD*. Final Work Plan, 432 pp.

Malcolm Pirnie, Inc., 2000c. *Health and Safety Plan Part 3: Remedial Investigation, Library of Congress Campus Facility, Fort George G. Meade, MD*. Final Work Plan. 80 pp. November 2000.

Malcolm Pirnie, Inc., 2001a. *Draft, Soil Background Concentration Report of Fort George G. Meade, Maryland*. July 2001.

Malcolm Pirnie, Inc., 2001b. *Draft, Remedial Investigation Report, Library of Congress Site, Fort George G. Meade, Maryland, Volumes I and II*. October 2001.

Malcolm Pirnie, Inc., 2001c. *Quality Control Summary/Analytical Results Report Vol. 1 of 5, Library of Congress Site, Fort George G. Meade, MD*. Draft, 159 pp.

Malcolm Pirnie, Inc., 2001d. *Quality Control Summary/Analytical Results Report Vol. 2 of 5, Library of Congress Site, Fort George G. Meade, MD*. Draft, 630 pp.

Malcolm Pirnie, Inc., 2001e. *Quality Control Summary/Analytical Results Report Vol. 3 of 5, Library of Congress Site, Fort George G. Meade, MD*. Draft, 619 pp.

Malcolm Pirnie, Inc., 2001f. *Quality Control Summary/Analytical Results Report Vol. 4 of 5, Library of Congress Site, Fort George G. Meade, MD*. Draft, 419 pp.

Malcolm Pirnie, Inc., 2001g. *Quality Control Summary/Analytical Results Report Vol. 5 of 5, Library of Congress Site, Fort George G. Meade, MD*. Draft, 100 pp. October 2001.

Malcolm Pirnie, Inc., 2001h. Appendix A: Field Sampling Forms, *Soil Background Concentration Report of Fort George G. Meade, Maryland.* 11 pp.

Malcolm Pirnie, Inc., 2001i. Appendix B: Quality Control Summary/Analytical Results Report, *Soil Background Concentration Report of Fort George G. Meade, Maryland.* 20 pp.

Malcolm Pirnie, Inc., 2001j. Appendix C: Background Study, Validated Data, *Soil Background Concentration Report of Fort George G. Meade, Maryland.* 356 pp.

Malcolm Pirnie, Inc., 2001k. Appendix D: Calculation of Summary Statistics, *Soil Background Concentration Report of Fort George G. Meade, Maryland.* 41 pp.

Malcolm Pirnie, Inc., 2001l. *Final Soil Background Concentration Report of Fort George G. Meade, Maryland.* Draft Final Document, 46 pp. October 2001.

Malcolm Pirnie, Inc., 2002a. *Remedial Investigation at the Library of Congress Site, Vol. 1 of 2, Fort George G. Meade, MD.* Draft Final Document, 251 pp.

Malcolm Pirnie, Inc., 2002b. *Remedial Investigation at the Library of Congress Site, Vol. 2 of 2, Fort George G. Meade, MD.* Draft Final Document, 172 pp.

Malcolm Pirnie, Inc., 2003a. *Closed, Transferring and Transferred Range/Site Inventory Report.* Draft Final Document, 104 pp.

Malcolm Pirnie, Inc., 2003b. *Response to Comments on the Draft-Final Remedial Investigation at the Library of Congress, Fort George G. Meade, MD.* 39 pp.

Malcolm Pirnie, Inc., 2003c. *Work Plan Part I, Field Sampling Plan, Groundwater Monitoring, Phoenix Military Reservation Fire Control Area, Jacksonville, Maryland.* 75 pp.

Malcolm Pirnie, Inc., 2003d. *Work Plan Part II A, Quality Assurance Project Plan, Groundwater Monitoring Phoenix Military Reservation Fire Control Area, Jacksonville, Maryland.* Revised Final Document, 446 pp.

Malcolm Pirnie, Inc., 2003e. *Work Plan Part II B, Quality Assurance Project Plan, Groundwater Monitoring Phoenix Military Reservation Fire Control Area, Jacksonville, Maryland.* Revised Final Document, 398 pp.

Malcolm Pirnie, Inc., 2003f. *Work Plan Part III, Field Sampling Plan, Groundwater Monitoring Phoenix Military Reservation Fire Control Area, Jacksonville, Maryland.* Revised Final Document, 87 pp.

Malcolm Pirnie, Inc., 2006a. *Historical Records Review, Fort George G. Meade, Maryland*. Final Document, 164 pp. May 2006.

Malcolm Pirnie, Inc., 2006b. *Final Remedial Investigation. Architect of the Capitol, Library of Congress, Fort George G. Meade, Maryland*. For Fort George G. Meade and U.S. Army Corps of Engineers, Baltimore District. July 2006.

Malcolm Pirnie, Inc., 2007a. *Draft Technical Memorandum, Architect of the Capitol, Library of Congress Parcel, Fort George G. Meade, Maryland*. prepared for USACE-Baltimore District, January 2007.

Malcolm Pirnie, Inc., 2007b. *Site Inspection Report, Fort George G. Meade, Maryland*. Final Document, April 2007.

Malcolm Pirnie, Inc., 2007c. *Geophysical Prove-Out (GPO) Plan, Mortar Range, Remedial Investigation, Fort George G. Meade, Maryland*. Final Document, September 2007.

Malcolm Pirnie, Inc., 2007d. *Geophysical Prove-Out (GPO) Letter Report, Mortar Range, Remedial Investigation, Fort George G. Meade, Maryland*. Final Document, October 2007.

Malcolm Pirnie, Inc., 2008a. *Work Plan, Mortar Range, Remedial Investigation, Fort George G. Meade, Maryland, FGGM-003-R-01*. Final Document, March 2008.

Malcolm Pirnie, Inc., 2008b. *Draft Final Remedial Investigation Report, Fire Control Area, Phoenix Military Reservation, Jacksonville, MD, Installation Restoration Program Site PMR-001.* prepared for USACE-Baltimore District and Fort George G. Meade. Prepared by Malcolm Pirnie, Inc. and The Louis Berger Group. May 2008.

Malcolm Pirnie, Inc., 2008c. *Work Plan Addendum, Sampling and Analysis Plan, Mortar Range, Remedial Investigation, Fort George G. Meade, Maryland.* Draft Document, August 2008.

Malcolm Pirnie, 2009a. *Draft Interim Measures Work Plan for Monitoring Wells 125d and 126d, Fort George G. Meade.* February 2009.

Malcolm Pirnie, Inc., 2009b. *Work Plan Addendum, Sampling and Analysis Plan, Mortar Range, Remedial Investigation, Fort George G. Meade, Maryland.* Final Document, December 2009.

Malcolm Pirnie, Inc., 2010. *Remedial Investigation Report, Mortar Range, Fort George G. Meade, Maryland.* Draft Document, April 2010.

Maryland Geological Survey (MGS), 1917. *Map of Camp Meade, Admiral, Maryland, 1917*. Prepared by Edward Bennett Mathews, State Geologist.

Maryland Department of the Environment (MDE), 1992. *Institution of Monitoring Programs for Sanitary and Rubble Landfills in Accordance with COMAR 26.04.07.09F*, letter, September 23, 1992.

MDE, 2001. *State of Maryland, Department of the Environment, Cleanup Standards for Soil and Groundwater.* August 2001.

MDE, 2003. *Maryland Environmental Assessment Technology for Leaking Underground Storage Tanks.* Oil Control Program, Waste Management Division, Maryland Department of the Environment. Revised February 2003.

NuTec Design Associates, Inc., 1997a. *Comprehensive Site Assessment and Relative Risk Site Evaluation for the Military District of Washington's Defense Environmental Restoration Program, DSERTS (Defense Site Environmental Restoration Tracking System) Site No. FGGM 11, Fort George Meade Tear Gas Chamber (Building 73)*. Draft Final Document, 45 pp. May 28, 1997.

NuTec Design Associates, Inc., 1997b. *Comprehensive Site Assessment and Relative Risk Site Evaluation for the Military District of Washington's Defense Environmental Restoration Program, Dserts Site No. FGGM 13, Fort George Meade Pesticide Shop (Building 6621).* Draft Final Document, 47 pp.

Office of the Quartermaster General, 1919. Property Description; 1919; Camp Meade Property Files; Real Estate Records, 1917-1922; Records of the Office of the Quartermaster General.

OHM, 1994. Ordnance Survey of the 7,600 Acre Parcel [Patuxent Research Refuge North Track]. Referenced in EM Federal, 2004.

OHM, 1995. *Final Report Ordnance Survey of the 7,600 Acre Parcel Fort George G. Meade.* Prepared for: US Army Environmental Center. December 18, 1995.

Ortt, Richard, 1968, *Generalized Geologic Map of Maryland*. Maryland Geological Survey, Department of Natural Resources, Baltimore, Maryland.

Peddicird, R.K., and J.S. LaKind, 2000. Ecological and Human Health Risks at an Outdoor Firing Range. Environmental Toxicology and Chemistry, 19(10) 2602-2613.

Plexus, 2006. Manor View Dump Site, Fort George G. Meade, Maryland, Landfill Gas Migration Control System Design and Installation of Active System, Design Report, Draft, September 2006. Prepared for the U.S. Army Corps of Engineers, Baltimore District, September, 2006.

Plexus, 2008a. *Final Report for the 2007 Debris Removal at the Uncontrolled Waste Site Patuxent Research Refuge – North Tract, Laurel, MD*. Prepared for USACE-Baltimore District, Plexus Scientific Corporation, January, 2008.

Plexus, 2008b. *Landfill Gas Migration Control System, Manor View Dump Site, IRP Site FGGM-93, Fort George G. Meade, Maryland, System Operations and Maintenance Manual.* Prepared for the U.S. Army Corps of Engineers, Baltimore District, March 2008.

Plexus, 2008c. *Manor View Dump Site, FGGM-93, Fort George G. Meade, Maryland, Landfill Gas Migration Control System, Emergency Removal Action Report, Draft Final*. Prepared for: U.S. Army Corps Of Engineers, Baltimore District, July 2008.

Plexus, 2008d. Uncontrolled Waste Site-Adjacent Landfill Removal November 2008 Letter Report, Plexus Scientific Corporation, December 17, 2008.

Radian International, 1998. Removal Action Report, Medical Waste Site, Patuxent Wildlife Research Center, Fort George G. Meade, Laurel, Maryland, December 1998.

Ref, 1995a. Ordnance Survey of the 7,600-acre parcel, which included areas surrounding the CFD. Referenced in EM Federal, 2004.

Ref, 1995b. *Radiological Background Study at Aberdeen Proving Grounds*, July 1995. Referenced in EM Federal, 2004.

Ref, 1998a. Tipton Airfield Decision Document. July 1998. Referenced in EM Federal, 2004.

Ref, 1998b. Tipton Airfield Decision Document Addendum. November 1998. Referenced in EM Federal, 2004.

Ref, 2000a. Action Memorandum issued by the Army July 2000 which addresses the risks related to UXO. Referenced in EM Federal, 2004.

Ref, 2000b. Signed ROD for the CFD (September 2000). Referenced in EM Federal, 2004.

Roy F. Weston, Inc., 1990a. *Preliminary Assessment Report for Fort Meade.* 48 pp.

Roy F. Weston, Inc., 1990b. *Preliminary Assessment Report for Phoenix Military Reservation*. 22 pp.

Roy F. Weston, Inc., 1992. *Preliminary Assessment Report, Addendum for Phoenix Military Reservation, MD.* Draft Final Document, 119 pp.

R&K, 2005. *Fort George G Meade, Maryland, CEMP Land Use Plan*. Comprehensive Expansion Master Plan (CEMP) drawing dated May 2005. Prepared by R&K Engineering, Inc.

Rummel, Klepper & Kahl Engineering (RK&K), 1994. *Initial Phase I Report, Site Assessment of 100+ Acre Parcel, LOC Campus Facility, Fort George G. Meade, Maryland*. Initial Phase 1 report, 84 pp. May 19, 1994.

Tetra Tech EC, Inc., 2006a. *Final Environmental Baseline Survey, Proposed Asymmetric Warfare Group, Headquarters Complex and Motor Pool, Fort George G. Meade, Maryland.,* April 2006.Tetra Tech EC, Inc., 2006b. *Final Site Specific Final Report, Non-Time Critical Ordnance and Explosives Removal Action at the Department of the Interior, North Tract Area, Fort George G. Meade.* Prepared for: U.S. Army Engineering and Support Center and USACE-Baltimore District. June 2006.

URS, 2007a. *Draft Final Remedial Investigation for the Former Pesticide Shop, Building 6621 Fort George G. Meade Anne Arundel County, Maryland*. Contract No. W912DR-04-D-0003.

URS, 2007b. *Geophysical Investigation Draft Report, Fort George G. Meade, Taylor Avenue Drum Site, Ft. Meade, Maryland*. February 9, 2007.

URS, 2007c. *Site Inspection Report, Taylor Avenue Drum Site, Fort George G. Meade*. September 12, 2007.

URS, 2008. *Annual and Semiannual Detection and Assessment Monitoring Reports for the Fort Meade Municipal Solid Waste Landfill Groundwater and Surface Water Monitoring Program*. Prepared for the Fort Meade Environmental Management Office and the U.S. Corps of Engineers, Baltimore District. June 2001 through May 2008 [fifteen documents].

URS Corp. *Removal Action Dump Site, Cooper Ave & Reece Road, Fort Meade, MD.* Draft, 8 pp.

URS Corp., 2001a. *Final Summary Report: Source Area Delineation of Carbon Tetrachloride DRMO Facility.* Draft Final Document, 60 pp.

URS Corp., 2001b. *Groundwater Monitoring for BTEX, MTBE and Naphthalene, Troop Boiler Plant, Bldg 8481, Fort George G. Meade, MD.* 24 pp.

URS Corp., 2002a. *Draft Site Investigation Report, O'Brien Road, Fort George G. Meade, Maryland*. 517 pp. March 15, 2002.

URS Corp., 2002b. *Fort George G. Meade, Focused Feasibility Study (FFS), Ordnance Demolition Area (ODA)*, November 2002.

URS Corp., 2003a. *Draft Health and Safety Plan, Remedial Investigation, Former Heavy Gun Cleaning and Repair Shop, Fort George G. Meade, Maryland.* (A) Draft Final Copy, 210 pp.

URS Corp., 2003b. *Draft Health and Safety Plan, Remedial Investigation, Former Heavy Gun Cleaning and Repair Shop, Fort George G. Meade, Maryland.* (B) Draft Final Copy, 210 pp.

URS Corp., 2003c. *Response to EPS and MDE Comments, Baseline Risk Assessment for DRMO.* 139 pp.

URS Corp., 2004a. *Final Implementation Plan and Site Safety and Health Plan, Remedial Investigation, Former Heavy Gun Cleaning and Repair Shop (Bldg 2246 & 2253), Fort George G. Meade, Maryland.* 290 pp.

URS Corp., 2004b. *Health and Safety Plan, Remedial Investigation, Manor View Dump Site, Fort George G. Meade, MD.* Draft Final Document, 218 pp.

URS Corp., 2004c. *Remedial Investigation Work Plan, Manor View Dump Site, Fort George G. Meade, MD.* Draft Final Document, 348 pp.

URS Corp., 2004d. Revised Final Work Plan, Preliminary Assessment and Site Investigation Work Plan of Suspect Sites at Fort George. G. Meade, Maryland. August 9, 2004.

URS Corp., 2006. *Final Remedial Investigation Work Plan for the Former Building 6621 Pesticides Shop*. January 11, 2006.

URS Group, Inc., 2001a. *Final Summary Report: Source Area Delineation of Carbon Tetrachloride, DRMO Facility*. Draft Final Document, 60 pp. February 2001.

URS Group, Inc., 2001b. *Groundwater Monitoring for BTEX, MTBE, and Naphthalene, Troop Boiler Plant, Bldg. 8481, Fort George G. Meade, MD*. 24 pp.

URS Group, Inc., 2002. *Draft Site Investigation Report, O'Brien Road, Fort George G. Meade, Maryland*. March 15, 2002.

URS Group, Inc., 2003. *Final Remedial Investigation and Baseline Risk Assessment, Defense Reutilization and Marketing Office (DRMO) Site, Fort George G. Meade, Maryland*. 213 pp. July 10, 2003.

URS Group, Inc., 2004a. *Draft Work Plan, Fort George G. Meade, Maryland*. Draft Final Document, 223 pp. February 2004.

URS Group, Inc., 2004b. *Draft Focused Feasibility Study (FFS), Defense Reutilization and Marketing Office (DRMO) Site, Fort George G. Meade, Maryland*. Draft Final Document, 223 pp. February 2004.

URS Group, Inc., 2004c. *Quarterly Data Report for January to March 2004, Groundwater Monitoring, Troop Boiler Plant, Building 8481, Fort George G. Meade, MD*. 123 pp.

URS Group, Inc., 2007a. *Draft Remedial Investigation Report, Manor View Dump Site, Fort George G. Meade, Maryland.* Prepared for U.S. Army Corps of Engineers, Baltimore District.

URS Group, Inc., 2007b. *Draft Final PA SI Report, Fort George G. Meade, Maryland*. Draft Final Document, 223 pp. September 2007.

URS, 2007c. Final Draft Remedial Investigation for the Former Pesticide Shop, Building 6621*, Fort George G. Meade Anne Arundel County, Maryland*. Contract No. W912DR-04-D-0003.

URS Group, Inc., 2008a. *Final Remedial Investigation Report Manor View Dump Site Fort George G. Meade, Maryland.* August 2008*.*

URS Group, Inc., 2008b. Preliminary Assessment/Site Investigation of Suspect Sites, Fort George G. Meade, Anne Arundel County, MD. June 2008.

URS Group, Inc. 2010a. *Preliminary Assessment/Site Inspection Draft Consensus Letters North Areas of Interest.* May 21, 2010.

URS Group, Inc. 2010b. *Preliminary Assessment/Site Inspection Draft Consensus Letters Southeast Areas of Interest.* May 21, 2010.

URS Group, Inc. 2010c. *Preliminary Assessment/Site Inspection Draft Consensus Letters Southwest Areas of Interest.* May 21, 2010.

URS Group, Inc. 2010d. *Preliminary Assessment/Site Inspection Draft Final Consensus Letters Golf Course Areas of Interest.* June 11, 2010.

URS Group, Inc. 2010e. *Preliminary Assessment/Site Inspection Draft Final Work Plan, including Appendix A: Field Sampling Plan, Attachment A: Golf Course Areas of Interest.* June 11, 2010.

URS Group, Inc. 2010f. *Preliminary Assessment/Site Inspection Work Plan, Appendix A: Field Sampling Plan, Draft Attachment B: North, Southeast, and Southwest Areas of Interest.* August 11, 2010.

USA Environmental, 2008. *Draft Addendum No. 7, Site Specific Final Report, Long Term Monitoring, Little Patuxent River, Fort George G. Meade, Maryland.* Prepared for URS Corporation and USACE-Baltimore District. Prepared by: USA Environmental, Inc. October 17, 2008.

U.S. Army, 2003. *Fort Meade, Maryland, Proposed Plan, Ordnance Demolition Area*, June 2003.

U.S. Army Corps of Engineers (USACE), 1991. Draft Site Inspection Addendum. Referenced in EM Federal, 2004.

USACE, 1994. *Comprehensive Groundwater/Surface Water Monitoring Plan of the Fort George G. Meade Sanitary Landfill,* Department of the Army, Fort George Meade, February 1994.

USACE, 1996. *Sampling Report, Environmental Sampling Activities, Covered Storage Facility, Fort George Meade, Anne Arundel County, M*D. 172 pp. December 1996.

USACE, 1997a. *Final Report Phase 1 HTRW Site Characterization and Analysis Penetrometer System (SCAPS) Investigation, Covered Storage Facility, Fort Meade*. Draft Final Report, 642 pp. April 1997.

USACE, 1997b. *Work Plan, Phase 2 HTRW Investigation, Covered Storage Facility, Fort George G. Meade, Anne Arundel County, MD*. 154 pp. June 1997.

USACE, 1997c. U.S. Army Corps of Engineers Ordnance and Explosives Removal Action. Referenced in EM Federal, 2004.

USACE, 1999a. RI sampling and data evaluation for the DRMO. Referenced in EM Federal, 2004.

USACE, 1999b. Basic Data Report, Site-Wide Groundwater Study, Fort George G Meade, Anne Arundel County, Maryland. Prepared by Engineering Division, U.S. Army Engineer District, Baltimore, August 1999.

USACE, 2000a. *Community Relations Plan.* Draft Final Document, 60 pp. Referenced in EM Federal, 2004

USACE, 2000b. Transmittal of information related to environmental history at Building 8481, from Russell Marsh of USACE to Robert Bangert of MDE, July 18, 2000.

USACE, 2001a. Engineering Evaluation/Cost Analysis Report for the Patuxent Research Refuge North Tract, Laurel, Maryland. Prepared by: U.S. Army Engineering and Support Center, Huntsville. June 2001.

USACE, 2001b. *Action Memorandum for the Patuxent Research Refuge North Tract, Laurel, MD.* Prepared by: U.S. Army Engineering and Support Center, Huntsville. August 2001.

USACE, 2001c. Final Soil Background Concentration Report (SBCR) for Fort George G. Meade, Maryland, Malcolm-Pirnie.

USACE, 2002a. *Well Removal/Replacement Project, Building 8481, Fort Meade, MD*. Draft Final Report, 99 pp.

USACE, 2002b. *Environmental Baseline Survey, U.S. Army Residential Communities Initiative Properties, Fort George G. Meade, MD.* CH2M HILL, March 2002.

USACE, 2002c. *Fort George G. Meade, Remedial Investigation/Feasibility Study, Remedial Investigation Report, Ordnance Demolition Area, Final*, IT Group June 2002.

USACE, 2002d. *Fort George G. Meade Focused Feasibility Study (FFS), Ordnance Demolition Area (ODA)*, Final Document. URS Group, Inc., November 2002.

USACE, 2003a. *Fort George G. Meade, Long-Term Monitoring Plan, Ordnance Demolition Area, Patuxent Research Refuge, Anne Arundel County, Maryland.* Final document prepared for USACE, Baltimore District, Baltimore, Maryland by URS Group, Bethesda, Maryland, July 2003.

USACE, 2003b. *Site Safety and Health Plan, Fort George G. Meade, Maryland, Ordnance Demolition Area*, Draft Document, URS Group, Inc., April, 2003.

USACE, 2003c. *Fort Meade, Maryland, Proposed Plan, Ordnance Demolition Area*, June 2003.

USACE, 2004. *Fort George G. Meade, Long-Term Monitoring Program, Long-Term Monitoring Report No. 1, Sampling and Analysis-July 2003, Ordnance Demolition Area, Patuxent*

Research Refuge, Anne Arundel County, Maryland. URS Group, Inc., Final February, 2004.

USACE, 2005a. *Fort George G. Meade, Long-Term Monitoring Program, Long-Term Monitoring Report No. 2, Four Rounds of Groundwater Sampling Between October 2003 and July 2004, Ordnance Demolition Area, Patuxent Research Refuge, Anne Arundel County, Maryland*. URS Group, Inc., Final April, 2005.

USACE, 2005b. *Fort George G. Meade, Decision Document, Ordnance Demolition Area, Patuxent Research Refuge, Anne Arundel County, Maryland*. Final December, 2005.

USACE, 2005c. Tipton Airfield Parcel, Revised Final Recurring Review Report, URS Group, Inc. March 2005.

USACE, 2006a. *Fort George G. Meade Installation Action Plan*. Draft Document, 54 pp. April 10, 2006.

USACE, 2006b. *Final Environmental Baseline Survey (EBS), Proposed Asymmetric Warfare Group Headquarters Complex and Motor Pool*. April 2006. (for FGGM 33 and adjacent Debris and Stain -1975)

USACE, 2006c. *Fort George G. Meade, Long-Term Monitoring Program, Long-Term Monitoring Report No. 3-Draft, Sampling and Analysis, Ordnance Demolition Area, Patuxent Research Refuge, Anne Arundel County, Maryland*. URS Group, Inc., Draft July, 2006.

USACE, 2007a. *Draft Technical Memorandum, Phoenix Military Reservation, Fire Control Area, Jacksonville, Maryland*. Prepared for USACE-Baltimore, prepared by Malcolm Pirnie, Inc and The Louis Berger Group, Inc, January 2007.

USACE, 2007b. *Final Environmental Impact Statement for Implementation of Base Realignment and Closure 2005 and Enhanced Use Lease Actions at Fort George G. Meade, Maryland*. Prepared by USACE-Mobile. August 2007.

USACE, 2007c. *Fort George G. Meade, Legacy Base Realignment and Closure Program, Long-Term Monitoring Report No. 4, Groundwater Sampling August-September 2006, Ordnance Demolition Area, Patuxent Research Refuge-North Track, Anne Arundel County, Maryland*. URS Group, Inc., Final October, 2007.

USACE, 2008a. *Fort George G. Meade, Legacy Base Realignment and Closure Program, Long-Term Monitoring Report No. 5, Groundwater Sampling August 2007, Ordnance Demolition Area, Patuxent Research Refuge-North Track, Anne Arundel County, Maryland*. URS Group, Inc., Draft Final April, 2008.

USACE, 2008b. *Final Long-Term Biennial Groundwater Monitoring Results, Tipton Airfield Parcel, Anne Arundel County, Maryland, August 2007 Sampling Event*, Prepared for USACE-Baltimore District, prepared by URS Group, Inc. September 2008.

USACE, 2008c. *Fort George G. Meade, Legacy Base Realignment and Closure Program, Long-Term Monitoring Report No. 6, Groundwater Sampling June and July 2008, Ordnance Demolition Area, Patuxent Research Refuge-North Track, Anne Arundel County, Maryland*. URS Group, Inc., Draft September, 2008.

USACE, 2008d. *Tipton Airfield Parcel, Draft Recurring Review Report*, Prepared for USACE-Baltimore District, prepared by URS Group, Inc. November 2008.

USACE, 2008e. Statement of Work for Remedial Investigation, Feasibility Study, Proposed Plan, and Record of Decision; Range 17 (Trap and Skeet Site) (FGGM 20), Patuxent Research Refuge-North Tract, Contract No. W912WJ-05-D-000.

USACE, 2008f. *Patuxent Research Refuge-North Tract Non-Time Critical Removal Action, Draft Recurring Review Report,* prepared by URS Group, Inc. December 2008.

U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM), 1994. *Groundwater Consultation No. 28-26-K33W-94, Initiation of Detection Monitoring Program*. 434 pp. March 23-June 30, 1994.

USACHPPM, 1995a. Memorandum dated February 24, 1995. Subject: *Groundwater Consultation No. 38-26-2669-95, Annual Report for Municipal Solid Waste Landfill Detection Monitoring Program Fort George G Meade, Maryland*, 28 November – 2 December 1994.

USACHPPM, 1995b. Memorandum dated December 15, 1995. Subject: *Groundwater Consultation No. 38-26-3440-95, Semiannual Report for Municipal Solid Waste Landfill Detection Monitoring Program Fort George G Meade, Maryland*, November 1994 – May 1995.

USACHPPM, 2006. Subsurface Soil Investigation No. 38-EH-05SW-07, Former Incinerator Site, Fort Meade, Maryland. October 16, 2006

USACHPPM, 2009. *Ground-Water and Surface Water Monitoring Plan for the Fort George G Meade Closed Sanitary Landfill Update 2009.* USACHPPM Project No. 38-EH-070W-07 February 2009.

U.S. Army Environmental Center (USAEC), 1989. Enhanced PA. Referenced in EM Federal, 2004.

USAEC, 1992a. Remedial Investigation Addendum (RIA) for Clean Fill Dump.

USAEC, 1992b. Site Inspection Study. Referenced in EM Federal, 2004.

USAEC, 1992c. Study by the Maryland Department of Natural Resources. Referenced in EM Federal, 2004.

USAEC,1992d. *Fort George G. Meade Active Sanitary Landfill and Clean Fill Dump Remedial Investigation Report.* Final. Prepared by Kilmer, K., et. al.: EA Engineering, Science, and Technology, Inc., Sparks, MD, December 1992.

U.S. Army Environmental Center (USAEC). 1994. Site Inspection Addendum, Fort Meade Feasibility Study and Remedial Investigation/Site Inspection, Draft. Arthur D. Little, Inc., Cambridge, MA. May 1994.

U.S. Army Environmental Hygiene Agency (USAEHA), 1989. Clean Fill Dump, June 1989.

USAEHA, 1990a. *Interim Final Report Groundwater Quality Survey No. 38-26-1383-90 Evaluation of Solid Waste Management Units, Fort George G. Meade, Maryland (A).* 94 pp.

USAEHA, 1990b. *Interim Final Report Groundwater Quality Survey No. 38-26-1383-90 Evaluation of Solid Waste Management Units, Fort George G. Meade, Maryland (B).* 94 pp.

U.S. Fish and Wildlife Service (USFWS)/EPA, 2004. Ecological Risk Assessment for Range 17 (Trap and Skeet Range), March 2004. U.S. Fish and Wildlife Service, Chesapeake Bayfield Office, Annapolis, MD, and EPA Environmental Response Team, Edison, N.J.

U.S. Geological Survey (USGS), 1984. *Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States*. Professional Paper 1270 by Shacklette and Boerngen, 1984. Versar, Inc., 1995a. *Additional Subsurface Investigation Activities, Post Laundry Facility, Fort George G. Meade, Fort Meade, Maryland*. 83 pp. September 27, 1995.

Versar, Inc., 1995b. *Safety and Health Program (SHP), Site-Specific Safety and Health Plan (SSHP), Subsurface Investigation, Post Laundry Facility, Fort George G. Meade, Fort Meade, Maryland.* 53 pp. June 2, 1995.

Versar, Inc., 1997. *Project Work Plan: Revised Comprehensive Site Assessment, Post Laundry Facility, Fort George G. Meade, Fort Meade, Maryland*. 10 pp. April 3, 1997.

Versar, Inc., 1999a. *Comprehensive Site Assessment, Former Trap and Skeet Range, 20th Street, Fort George G. Meade, Fort Meade, MD.* (A) 233 pp.

Versar, Inc., 1999b. *Comprehensive Site Assessment, Former Trap and Skeet Range, 20th Street, Fort George G. Meade, Fort Meade, MD*. (B) 234 pp. June 10, 1999.

Versar, Inc., 1999c. *Comprehensive Site Assessment, Former Incinerator Building, 21-½ Street, Fort George G. Meade, Fort Meade, Maryland* (B). Review Draft, 110 pp.

Versar, Inc., 1999d. *Dec 1999 Quarterly Groundwater Sampling Results for the Post Laundry Facility, Fort George G. Meade, Fort Meade, Maryland* (3). 48 pp. December 20, 1999.

Versar, Inc., 1999e. *Jan 1999 Quarterly Groundwater Sampling Results for the Post Laundry Facility, Fort George G. Meade, Fort Meade, Maryland (1b).* 53 pp. March 1, 1999.

Versar, Inc., 1999f. *May 1999 Quarterly Groundwater Sampling Results for the Post Laundry Facility (Building 2250), Fort George G. Meade, Fort Meade, Maryland* (2). 41 pp. June 24, 1999.

Versar, Inc., 1999g. *Risk Assessment for Fort Meade's Sanitary Landfill, Fort Meade, Maryland.* July 8, 1999.

Versar, Inc., 1999h. *Sampling Visit, Building 8881, Fort George G. Meade, Fort Meade, Maryland* (A and B). 66 pp. September 13, 1999

Versar, Inc., 1999i. *Sampling Visit, Solid Waste Management Unit 10, Ft. George G. Meade, Fort Meade, Maryland.* 61 pp. September, 1999.

Versar, Inc., 1999j. *Sampling Visit, Solid Waste Management Unit 11, Building 546, Ft. George G. Meade, Fort Meade, Maryland.* September 1999.

Versar, Inc., 1999k. *Sampling Visit, Solid Waste Management Unit 12, Building 940, Ft. George G. Meade, Fort Meade, Maryland.* 39 pp. September 1999.

Versar, Inc., 1999l. *Sampling Visit, Solid Waste Management Unit 13, Building 940, Ft. George G. Meade, Fort Meade, Maryland.* 52 pp. September 1999.

Versar Inc., 1999m. *Sampling Visit Solid Waste Management Units 14 and 15, Building 1007, Fort George G. Meade, Fort Meade, MD,* September 1999.

Versar Inc., 1999n. *Sampling Visit Solid Waste Management Units 16, 17, and 18, Wash Rack and Oil/Water Separator, Fort George G. Meade, Fort Meade, MD,* September 1999.

Versar, Inc., 1999o. *Sampling Visit, Solid Waste Management Unit 19, Building 1251, Ft. George G. Meade, Fort Meade, Maryland.* 65 pp. September 16, 1999.

Versar, Inc., 1999p. *Sampling Visit, Solid Waste Management Unit 20, Building 1251, Ft. George G. Meade, Fort Meade, Maryland.* 47 pp. September 16, 1999.

Versar, Inc., 1999q. *Sampling Visit, Solid Waste Management Unit 21, Building 1251, Ft. George G. Meade, Fort Meade, Maryland.* 56 pp. September 16, 1999.

Versar, Inc., 1999r. *Sampling Visit, Solid Waste Management Unit 25, Building 2120C, Ft. George G. Meade, Fort Meade, Maryland*. 72 pp. September 16, 1999.

Versar, Inc., 1999s. *Sampling Visit, Solid Waste Management Unit 26, Building 2120C, Ft. George G. Meade, Fort Meade, Maryland*. 40 pp. September 16, 1999.

Versar, Inc., 1999t. *Sampling Visit, Solid Waste Management Unit 27, Building 2120C, Ft. George G. Meade, Fort Meade, Maryland*. 57 pp. September 16, 1999.

Versar, Inc., 1999u. *Sampling Visit, Solid Waste Management Unit 28, Building 2120C, Ft. George G. Meade, Fort Meade, Maryland*. 59 pp. September 16, 1999.

Versar, Inc., 1999v. *Sampling Visit, Solid Waste Management Units 29 and 30, Building 2122*, as referenced in EM Federal Corp., 2004.

Versar, Inc., 1999w. *Sampling Visit, Solid Waste Management Units 31, Ft. George G. Meade, Fort Meade, Maryland.* 50 pp. September, 1999.

Versar, Inc., 1999x. *Sampling Visit, Solid Waste Management Unit 32, Ft. George G. Meade, Fort Meade, Maryland.* 49 pp. September, 1999.

Versar, Inc., 1999y. *Sampling Visit, Solid Waste Management Units 33 and 34, Ft. George G. Meade, Fort Meade, Maryland.* 624 pp. September, 1999.

Versar, Inc., 1999z. *Sampling Visit, Solid Waste Management Units 35 and 36*, *Building 2128, Ft. George G. Meade, Fort Meade, Maryland.* 1999.

Versar, Inc., 1999aa. *Sampling Visit, Solid Waste Management Unit 74, Building 2490, Ft. George G. Meade, Fort Meade, Maryland*. 24 pp. September 1999.

Versar, Inc., 1999ab. *Sampling Visit, Solid Waste Management Unit 77, Building 2630, Ft. George G. Meade, Fort Meade, Maryland.* 21 pp. September 1999.

Versar, Inc., 1999ac. *Sampling Visit, Solid Waste Management Unit 78, Building 2630, Ft. George G. Meade, Fort Meade, Maryland.* 26 pp. September 1999.

Versar, Inc., 1999ad. *Sampling Visit, Solid Waste Management Unit 79, Building 2630, Ft. George G. Meade, Fort Meade, Maryland.* 22 pp. September 1999.

Versar, Inc., 1999ae. *Sampling Visit, Solid Waste Management Unit 99, Building 4411, Ft. George G. Meade, Fort Meade, Maryland.* June 7, 2000.

Versar, Inc., 1999af. *Sampling Visit, Solid Waste Management Unit 146, Building 940, Ft. George G. Meade, Fort Meade, Maryland.* 24 pp. September 1999.

Versar, Inc., 1999ag. *Sampling Visit, Solid Waste Management Unit 147, Building 2227, Ft. George G. Meade, Fort Meade, Maryland*. September 16, 1999.

Versar, Inc., 1999ah. *Volumes I-VI, Sampling Visits, Solid Waste Management Units, Ft. George G. Meade, Fort Meade, Maryland*. September 1999.Versar, 1999ii. *Hazardous Waste Closure Report, Controlled Hazardous Substance Storage Facility, Building 6527, Fort George G. Meade, Maryland*. January 5, 1999.

Versar, Inc., 2000a. *Comprehensive Site Assessment, Former Battery Disposal Facility, Morrison Street, Fort George G. Meade, Maryland* (A). 194 pp. July 31, 2000.

Versar, Inc., 2000b. *Draft Initial Delineation Report, Department of Logistics, Storage Services and Supply Division Complex, Pepper Road, Fort George G. Meade, Fort Meade, Maryland.* Draft Final Document, 502 pp. September 12, 2000.

Versar, Inc., 2000c. *Draft Initial Delineation Report, Department of Logistics Tactical & Support Vehicle/Heavy Equipment Maintenance Facility, Huber Road*. August 2000.

Versar, Inc., 2000d. *Draft Initial Delineation Report, Department of Public Works Storage Yard, 2nd Street, Fort George G. Meade, Fort Meade, Maryland.* Draft Final Document. 452 pp. September 12, 2000.

Versar, Inc., 2000e. *Draft Initial Delineation Report, Directorate of Office Management Complex, 20th Street, Fort George G. Meade, Ft. Meade, Maryland*. Draft Final Document, 593 pp. September 12, 2000.

Versar, Inc., 2000f. *Draft Initial Delineation Reports, Equipment/Vehicle Storage Yard Wash Rack System (Bldg. 1007), 20th Street, Fort George G. Meade, Ft. Meade, Maryland, and Department of Public Works Storage and Receiving Yard (Bldg. 2207), 1st Street, Fort George G. Meade, Fort Meade, Maryland*. Draft Final Document, 437 pp. September 12, 2000.

Versar, Inc., 2000g. *Draft Initial Delineation Report, Ft. George G. Meade, Fort Meade, Maryland*, September 2000. As referenced in EM Federal, 2004.

Versar, Inc., 2000h. *Draft Initial Delineation Reports, Photo Lab (Bldg. 546), 8th Street, and Former Vehicle Maintenance Shop (Bldg. 2227), 3rd Street, Fort George G. Meade, Fort Meade, Maryland*. Draft Final Document, 453 pp. September 12, 2000.

Versar, Inc., 2000i. *Draft Initial Delineation Report, Wash Rack Oil/Water Separation at Equipment Concentration Station 86 (Bldg. 2120C), Heavy Equipment and Generator Maintenance Shop (Bldg. 2128), and Forensic Toxicology Drug Testing Lab (Bldg. 2490), Fort George G. Meade, Fort Meade, Maryland*. Draft Final Document, 483 pp. September 12, 2000.

Versar, Inc., 2000j. *Sampling Visit, Solid Waste Management Unit 38, Building 2213, Ft. George G. Meade, Fort Meade, Maryland*. July 7, 2000.

Versar, Inc., 2000k. *Sampling Visit, Solid Waste Management Unit 63/64, Building 2276, Ft. George G. Meade, Fort Meade, Maryland*. July 2000.

Versar, Inc., 2000l. *Sampling Visit, Solid Waste Management Unit 72, Building 2482, Ft. George G. Meade, Fort Meade, Maryland.* 2000.

Versar, Inc., 2000m. *Sampling Visit, Solid Waste Management Unit 73, Building 2482, Ft. George G. Meade, Fort Meade, Maryland.* 63 pp. June 2000.

Versar, Inc., 2000n. *Sampling Visit, Solid Waste Management Units 75 and 76, Ft. George G. Meade, Fort Meade, Maryland.* 68 pp. June 2000.

Versar, Inc., 2000o. *Sampling Visit, Solid Waste Management Unit 94, Building 2804, Ft. George G. Meade, Fort Meade, Maryland*. July 7, 2000.

Versar, Inc., 2000p. *Sampling Visit, Solid Waste Management Unit 95, Building 2805, Ft. George G. Meade, Fort Meade, Maryland*. July 7, 2000.

Versar, Inc., 2000q. *Sampling Visit, Solid Waste Management Units 96 and 97, Ft. George G. Meade, Fort Meade, Maryland.* 204 pp. June 2000.

Versar, Inc., 2000r. *Sampling Visit, Solid Waste Management Unit 98, Ft. George G. Meade, Fort Meade, Maryland.* 83 pp. June 2000.

Versar, Inc., 2000s. *Sampling Visit, Solid Waste Management Unit 109, Building 8472, Ft. George G. Meade, Fort Meade, Maryland.*. June 7, 2000.

Versar, Inc., 2000t. *Volumes I and II of II, Sampling Visits (23 Additional), Solid Waste Management Units, Ft. George G. Meade, Fort Meade, Maryland*. July 7, 2000.

Versar, Inc., 2000u. *Work Plan, Final Comprehensive Site Assessment, Post Laundry Facility (Bldg 2250), Fort George G. Meade, Fort Meade, Maryland* (A - 8 pp., B - 10 pp.) January 5, 2000.

Versar, Inc., 2000v. *Work Plan, Initial Delineation Activities, Impacted SWMUs,* as referenced in EM Federal Corp., 2004.

Versar, Inc., 200la. *Final Comprehensive Site Assessment, Post Laundry Facility, Fort George G. Meade, Fort Meade, Maryland*, Vol. 1 of 2. 332 pp. and Vol. 2 of 2, 662 pp. October 20, 2000.

Versar, Inc., 2001b. *Initial Delineation Report, Former Vehicle Maintenance Shop, Ft. George G. Meade, Fort Meade, Maryland.* August 30, 2000.

Versar, Inc., 2001c. *Sampling Visit, Solid Waste Management Unit 93, Building 2802, Ft. George G. Meade, Fort Meade, Maryland.* September 2001.

Versar, Inc., 2001d. *Site Investigation Report, Building 940, Former Wash Rack and Oil/Water Separator (SWMUs 12/13)*. July 2001.

Versar, Inc., 2001e. *Site Investigation Report, Building 1251 (SWMU 19)*. July 2001.

Versar, Inc., 2001f. *Site Investigation Report, Building 2120C (SWMU 25).* 134 pp. October 30, 2001.

Versar, Inc., 2001g. *Site Investigation Report, Building 2122 (SWMUs 29/30)*. October 2001.

Versar, Inc., 2001h. *Site Investigation Report, Building 2213 (SWMU 38)*. 200 pp. August 14, 2001.

Versar, Inc., 2001i. *Site Investigation Report, Building 2220 (SWMU 42).* 188 pp. August 14, 2001.

Versar, Inc., 2001j. *Site Investigation Report, Building 2240 (SWMU 45/46).* 189 pp. September 14, 2001.

Versar, Inc., 2001k. *Site Investigation Report, Building 2253 (SWMU 61/62).* 173 pp. July 13, 2001.

Versar, Inc., 2001l. *Site Investigation Report, Building 2276 (SWMUs 63/64).* 186 pp. September 14, 2001.

Versar, Inc., 2001m. *Site Investigation Report, Building 2286 (SWMUs 66/67).* 230 pp. September 14, 2001.

Versar, Inc., 2001n. *Site Investigation Report, Building 2482 (SWMU 72).* 155 pp. July 13, 2001.

Versar, Inc., 2001o. *Site Investigation Report, Building 2630, Wash Rack (SWMU 78)*. 130 pp. July 13, 2001.

Versar, Inc., 2001p. *Site Investigation Report, Building 2724 (SWMU 80 Through 86).* 324 pp. December 7, 2001.

Versar, Inc., 2001q. *Site Investigation Report, Building 4587 (SWMU 101/102).* 218 pp. December 7, 2001.

Versar, Inc., 2001r. *Site Investigation Report, Building 4680 (SWMU 103).* 421 pp. December 7, 2001.

Versar, Inc., 2001s. *Site Investigation Report, Building 6513 (SWMU 150).* 132 pp. August 14, 2001.

Versar, Inc., 2001t. *Site Investigation Report, Building 8480, Former Wash Rack (SWMUs 110/111).* 151 pp. September 14, 2001.

Versar, Inc., 2001u. *Site Investigation Report, Building 8485 (SWMUs 115/116).* Ft Meade. 259 pp. November 2, 2001.

Versar, Inc., 2001v. *Site Investigation Report, Building 8486 (SWMUs 117/118).* 406 pp. November 2001.

Versar, Inc., 2001w. *Site Investigation Report, Building 8549 (SWMU 121-124).* 380 pp. September 14, 2001.

Versar, Inc., 2001x. *Site Investigation Report, Building 8688 (SWMU 129-130).* 99 pp. August 14, 2001.

Versar, Inc., 2001y. *Site Investigation Report, Golf Course Maintenance Area, Buildings 8860, 8880, 8890, and 8896 (SWMUs 131-133 and 135-137).* 355 pp. December 18, 2001.

Versar, Inc., 2001z. *Site Investigation Report, Former Wash Rack at 4th and Y Streets (SWMU 143/144), Fort George G. Meade, Fort Meade, Maryland,* 124 pp. July 13, 2001.

Versar, Inc., 2001aa. *Site Investigation Report, Former Wash Rack near Building 8485 (SWMU 116A).* 259 pp. November 7, 2001.

Versar, Inc., 2001ab. *Site Investigation Report, Wash Racks at Building 2728 (SWMU 87, 88, 89, 90, 91, and 92).* 263 pp. December 14, 2001.

Versar, Inc., 2001ac. *Sampling Visit, Solid Waste Management Unit 93, Building 2802, Ft. George G. Meade, Fort Meade, Maryland.* September 2001.

Versar, Inc., 2002a. *Additional investigation of soils at Buildings 2285 and 2290*, as referenced in EM Federal Corp., 2004.

Versar, Inc., 2002b. *Corrective Action Plan, Former Trap and Skeet Range, 20th Street, Fort George G. Meade, Fort Meade, MD*. (A) Draft Final Document, 542 pp. December 17, 2002.

Versar, Inc., 2002c. *Corrective Action Plan, Former Trap and Skeet Range, 20th Street, Fort George G. Meade, Fort Meade, MD.* (B) Draft Final Document, 541 pp. December 17, 2002.

Versar, Inc., 2002d. *Draft data from data gap investigations performed in June 2002*. 2804 (SWMU 94).

Versar, Inc., 2002e. *Draft data from data gap investigations performed in June 2002*. 3000 (SWMU 98).

Versar, Inc., 2002f. *Draft data from data gap investigations performed in June 2002*. 4411 (SWMU 99).

Versar, Inc., 2002g. *Draft data from data gap investigations* performed in June 2002. Referenced in EM Federal, 2004.

Versar, Inc., 2002h. *Response to EPA Region 3 Comments, Post Laundry Facility (Bldg 2250), Final Comprehensive Site Assessment, Fort Meade, Maryland (CA).* 10 pp. January 10, 2002.

Versar, Inc., 2002i. *Site Investigation Report - Building 2266*. As referenced in USACE, 2006. *Fort George G. Meade Installation Action Plan*. September 6, 2002.

Versar, Inc., 2003a. *Draft data from data gap investigations performed in June 2002 (SWMU 72 and 104)*.

Versar, Inc., 2003b. *Project Summary Reports, RCRA and Data Gap, Solid Waste Management Units, Fort George G. Meade, Fort Meade, Maryland*.

Versar, Inc., 2003c. *Project Summary Report, Solid Waste Management Units 25 and 26, Building 2120C and Oil/Water Separator, Fort George G Meade, Fort Meade, Maryland*. March 26, 2003.

Versar, Inc., 2003d. *Project Summary Report, RCRA and Data Gap, Solid Waste Management Unit 72, Building 2482, Fort George G. Meade, Ft. Meade, Maryland.* 49 pp. March 2003.

Versar, Inc., 2003e*. Project Summary Report, SWMU 110/111, Building 8480, Fort George G. Meade, Fort Meade, Maryland. 2003.*

Versar Inc., 2003f. *Project Summary Report, SWMUs128 and 128, Building 8551 – Oil Water Separator and Wash Rack, Fort George G. Meade, Fort Meade, MD. 2003.*

Versar, Inc., 2003g. *Remedial Investigation Work Plan for the Golf Course Maintenance Facility Bldgs. 8860, 8870, 8880, 8890 & 8890A (SWMUs131 - 137), Fort George G. Meade, Maryland.* 257 pp. October 28, 2003.

Versar, Inc., 2003h. *Remedial Investigation Work Plan for the Metal and Sign Fabrication Shop, Building 2213 (SWMU 38), Fort George G. Meade, Maryland*. 225 pp. September 15, 2003.

Versar, Inc., 2003i. *Remedial Investigation Work Plan for Former Motor Pool Maintenance Facility (FGGM86), Fort George G. Meade, Maryland*. (A) 210 pp. May and December 2003.

Versar, Inc., 2003j. *Remedial Investigation Work Plan for Former Motor Pool Maintenance Facility (FGGM86), Fort George G. Meade, Maryland*. (B) 222 pp. May and December 2003.

Versar, Inc., 2003k. *Remedial Investigation Work Plan, Former Motor Pool Maintenance Facility (FGGM86), Fort George G. Meade, Maryland*. (B) 222 pp. May and December 2003.

Versar, Inc., 2003l. *Remedial Investigation Work Plan for Former Nike Missile Control Site (FGGM 87), Buildings 1945, 1946, 1957, 1958, 1974, 1976, 1977, 1978, and 1990*. June 13, 2003.

Versar, Inc., 2003m. *Remedial Investigation Work Plan for Former Small Arms Target Range Bldgs. 6513 and 6522 (SWMUs150, 151 and 152), Fort George G. Meade, Maryland*. 224 pp. September 8, 2003.

Versar, Inc., 2003n. *Remedial Investigation Work Plan for Former Tank Cleaning Supply Warehouses (FGGM 90), Buildings 2240-2243 & 2247-2249*. June 4, 2003.

Versar, Inc., 2003o. *Remedial Investigation Work Plan for Former Tank Maintenance Facility (FGGM 88), Building 2207*. July 21, 2003.

Versar, Inc., 2003p. *Remedial Investigation Work Plan for Former Tank Maintenance Facility (FGGM 89), Fort George G. Meade, Maryland*. July 25, 2003.

Versar, Inc., 2003q. *Soil Investigation at Former Building 6621, Gordon Street and York Avenue, Ft. Meade, Maryland*, Versar Project No. 110941.00001.001. October 31, 2003.

Versar, Inc., 2003r. *Summary Project Report, Solid Waste Management Unit 35/36, Building 2128, Fort George G. Meade, Fort Meade, Maryland,* 2003*.*

Versar, Inc., 2003s. *Well Closure Report, Former Lead Battery Disposal Facility (Building T-2283), Fort George G. Meade, Ft. Meade, Maryland*. 10 pp. July 23, 2003.

Versar, 2003. Draft data from data gap investigations performed in June 2002. 6527 (SWMU 104).

Versar, Inc., 2004a. *Geophysical Survey of Possible Dump Site and an Abandoned Cemetery, Fort George G. Meade, Maryland*. May 2004.

Versar, Inc., 2004b. *Project Work Plan, Engineering Evaluation/Cost Analysis, Former Trap and Skeet Range, Fort George G. Meade, Fort Meade, MD*. (A) 247 pp. March 12, 2004.

Versar, Inc., 2004c. *Soil Investigation at Former Building 6621, Gordon Street and York Avenue, Ft. Meade, Maryland*, Versar Project No. 110941.00001.002. April 19, 2004.

Versar, Inc., 2005a. *Draft Data Report, FGGM 83 Former Trap and Skeet Range. Fort George G. Meade, Maryland.* February 4, 2005.

Versar, Inc., 2005b. *Investigation Data Report, Former Motor Maintenance Facility, FGGM 86.* January 31, 2005.

Versar, Inc., 2007. *Current Conditions Site Assessment, Granite Control Site.* Prepared for Fort George G. Meade. July 2, 2007.

Vyas, N.B., J.W. Spann, G.H. Heinz, W.N. Beter, J.A. Jaquette, and J.M. Mengelkoch, 2000. Lead poisoning of passerines at a trap and skeet range. Environmental Pollution 107: 159-166.

War Department, 1924. *War Game Map*. War Department, Corps of Engineers, Intelligence Section, Office Chief if Engineers. Based on October 1922 to June 1923 survey. Map circa 1924

Woodward-Clyde Federal Services, 1991. *Phoenix Military Reservation Monitoring - III Quarterly Groundwater Sampling, Final Work Plan.* 237 pp.

Woodward-Clyde Federal Services, 1992. *Final Work Plan, Phoenix Military Reservation Monitoring – IV, Jacksonville, Maryland.* 247 pp.

Personal Communication

Personal Communication, 2009. FGGM to URS March 4, 2009 regarding Chisholm Ave and 6th Street site.

Personal Communication, 2009b. Power Point presentation for September 24, 2009 Restoration Advisory Board meeting. FGGM to URS October 23, 2009.

Personal Communication, 2009c. Memorandum from Department of the Army to FGGM regarding groundwater sampling of wells MW-125d and MW-126d. FGGM to URS March 4, 2009

Personal Communication, 2009d. FGGM to URS May 28, 2009 regarding Stained Soils along 3rd Street site.

Personal Communication, 2010a. Mike Doetzer and Franklin at the Golf Course Maintenance Yard to Jerry Kashatus (URS), January 12, 2010.

FGGM, Personal Communication, 2010b. Paul Fluck DPW to Jerry Kashatus (URS), July 15, 2010.

Appendix A
EPA's Acceptance of 2009 SMP and 2010 Amended SMP

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

May 4, 2010

Paul V. Fluck, P.G., REP
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
239 Chisholm Avenue
Suite 5115
Fort George G. Meade, MD. 20755-7068

Subject: 2009 SMP

Mr. Fluck:

Thank you for the opportunity to review the subject document. EPA has no additional comments on the 2009 SMP and it is EPA's opinion that the document is ready for inclusion in the Administrative Record.

If you have any questions, please contact me at 215-814-3378.

Sincerely,

John Burchette
Remedial Project Manager

cc: Mr. Kurt Scarbro

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

September 15th, 2010

Paul V. Fluck, P.G., REP
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
239 Chisholm Avenue
Suite 5115
Fort George G. Meade, MD. 20755-7068

Subject: 2010 Site Management Plan

Mr. Fluck:

Thank you for the opportunity to review the 2010 SMP for Fort George G. Meade.

EPA has reviewed the subject document and has no additional comments. It is EPA's opinion that the document is ready for inclusion in the administrative record.

If you have any questions, please contact me at 215-814-3378.

Sincerely,

John Burchette
Remedial Project Manager

cc: Mr. Kurt Scarbro

Appendix B
Response to Comments on the Draft Final Amended 2011 SMP

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

August 29, 2011

Paul V. Fluck, P.G., REP
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
239 Chisholm Avenue
Suite 5115
Fort George G. Meade, MD. 20755-7068

Subject: 2011 Draft Final Site Management Plan

Mr. Fluck:

Thank you for the opportunity to review the subject document. EPA has no additional comments on the Draft Final SMP. Please submit the Final version of the document when you get the opportunity.

Sincerely,

John Burchette
Remedial Project Manager

cc: Mr. Kurt Scarbro

Response to Comments
Fort George G. Meade, Maryland
2011 Draft Final Site Management Plan

Response to FGGM Comments Submitted 20 September 2011:

Meade Legacy BEC Comments to DF SMP dated August 2011

Section 2.2 – MMRP Open AOIs

1) Where is FGGM-001-R-002 (High Explosive and Impact Area)?

Response*: FGGM-001-R-01 is in Section 2.3.11. FGGM-002-R-01 is in Section 2.3.12.*

Section 2.3.1 – FGGM 10

1) Current Status: Last sent: Change "Biennial" to "Annual".
2) Cleanup/Exit Strategy: Please revise the text to: "Continue the corrective measures O&M (NFA with LTGM on an annual basis) per the results of the September 2011 TAP 5-Year Final Review."

Response*: The suggested changes have been made.*

Section 2.3.2 – FGGM 20

1) Current Status: Last sent: Change to "A Final RoD was submitted in September 2011."
2) Cleanup/Exit Status: Change order of 2nd and 3rd sentences.

Response*: The suggested changes have been made.*

Section 2.3.4 – FGGM 31

1) Previous Studies: Last sent: Change to "……were conducted in 2001, 2006, and 2011 at the IAL3."

Response*: The suggested change has been made.*

Section 2.3.7 – FGGM 81

1) Current Status: Last sent: Change to "….is monitored on an annual basis."
2) Cleanup/Exit Strategy: This should be "Continue the corrective measures O&M (NFA with LTGM on an annual basis) per the results of the September 2011 CFD Final 5-Yr Review.

Response*: The suggested changes have been made.*

Section 2.3.11 - FGGM-001-R-01

1) Current Status: Change to: "The ROD (U.S. Army, 2000b) incorporates the Action Memorandum (July 2000) which addresses the risks related to unexploded ordnance (UXO) at the CFD and protects human health and the environment. The Action Memorandum includes the establishment and enforcement of UXO land use restrictions."

2) Cleanup/Exit Strategy: Change to "The Army intends to transfer the property to DOI in FY12. After transfer, FGGM 001-R-01 will be administratively closed and UXO related work at CFD will be associated with FGGM 002-R-01 - High Explosive Impact and Disposal (HEI) Area. Submit a PP, ROD, and LUCIP in FY12 for the HEI Area to better enforce and maintain the existing UXO LUCs at the PRR-NT parcel, which includes the CFD OU."

***Response**: The suggested changes have been made.*

Section 2.3.12 – FGGM-002-R-01

1) Cleanup/Exit Strategy: Sent 2; change to "……..property in FY12." Sent 3; change to "A LUCIP will also be developed to better enforce and maintain the existing UXO LUCs at the PRR-NT."

***Response**: The suggested change has been made.*