FORT MONMOUTH REUSE AND REDEVELOPMENT PLAN

TECHNICAL MEMORANDUM: ENVIRONMENTAL CONDITIONS

Fort Monmouth Reuse and Redevelopment Plan
Technical Memorandum: Environmental Conditions
Prepared for: Fort Monmouth Economic Revitalization Planning Authority
Prepared by: Matrix Environmental Services, LLC
September 14, 2007

This Technical Memorandum presents a summary of known and potential environmental conditions at Fort Monmouth (FTMM) that should be considered during reuse planning. The environmental analysis presented herein was prepared by Matrix Environmental Services, a subsidiary of Matrix Design Group, Inc. (collectively, Matrix) using limited data generated by other parties. The primary documents used in the preparation of this technical memorandum included the United States Army's (U.S. Army's) *BRAC 2005 Final Environmental Condition of Property Report, Fort Monmouth, Monmouth County, New Jersey* dated January 2007 and the *Historical Site Assessment Report and Addendum to the Environmental Condition of Property, Fort Monmouth, New Jersey* dated January 2007.

Approach

The U.S. Army has recently provided Matrix with additional documentation regarding environmental conditions at the installation. Information regarding the existing environmental conditions at Fort Monmouth was obtained through a review of historical literature cited in Table E-1, as well as discussions with Joe Fallon, Wanda Green, and Robert Melascaglia from the U.S. Army Garrison at FTMM. Information contained in the additional documents listed in Table E-1 may change the findings and conclusions presented, and this report will be updated with additional information as it is reviewed. The findings and conclusions presented herein are based on our professional opinion and are based on documents provided and produced by others. The potential exists for unreported and unknown environmental issues associated with the site or surrounding area that are not included in this document.

Background.

The primary mission of FTMM is to provide command, administrative, and logistical support for Headquarters, U.S. Army Communications and Electronics Command. Tenant activities at FTMM are related to the performance of research, development, procurement, and production of prototype communications and electronics equipment for use by the United States Armed Forces. The Main post (MP) MP provides supporting administrative, training, and housing functions, as well as many of the community and industrial facilities for FTMM. These facilities are distributed across the property, with no distinct clustering of functions. The Charles Wood Area (CWA) is used primarily for research and development, testing, housing, and recreation. The CWA research, development, and testing facilities occupy the southwest corner of the operational area. The northwest corner formerly held residential units but is currently undeveloped. Residential units currently occupy the southeastern boundary and the golf course occupies the northeast corner.

Historical Site Description and Operations

The majority of MP was previously developed as the Monmouth Park Race Track, dating from 1870 to the time the track was closed in 1893. Portions of the property were cultivated for potato farming from that time until the Army leased the property in 1917. The majority of CWA was previously developed as the Sun Eagles Country Club and residential housing prior to Army purchase in 1941. Additional portions of the property were purchased from private land owners over the next several decades.

Fort Monmouth has a long history of research and development (R&D) activity. The majority of this activity has been related to communications and electronic equipment. For the completion of these research activities, FTMM has operated and continues to operate a variety of laboratories. In support of these activities FTMM has provided support activities including vehicle maintenance, warehousing, medical and dental services, photo processing and printing. Hazardous substances and radioactive materials related to these activities have been identified on the property. Known and potential environmental concerns identified to date include:

- Active and conditionally closed historical hazardous substance and/or waste sites
- Petroleum hydrocarbon releases from aboveground storage tanks (ASTs), underground storage tanks (USTs), and oil/water separators
- Potential munitions and explosives of concern (MEC) sites
- Potential radioactive material (RAM) contamination
- Underground utilities, building drains, and sewers with potential releases
- Asbestos and lead-based paint
- Potential polychlorinated biphenyl (PCB)-impacted equipment, storage areas, spill, and disposal areas
- Pesticide and herbicide storage areas, mixing areas, and site wide application

Existing and potential environmental constraints related to reuse for the MP and the CWA are provided on Figures 1 and 2, respectively.

Fort Monmouth is currently registered with the U.S. Environmental Protection Agency as a large quantity generator of hazardous waste. This designation allows the U.S. Army to store waste at the site for a period of 90 days or less. The installation is also registered with the New Jersey Department of Environmental Protection (NJDEP) as a generator of medical waste and as a Class D Recycling Center, which allows the U.S. Army to recycle materials such as antifreeze, batteries, latex paint, oil-based finishes, and lamps. The Class D Recycling Center accepts material from FTMM and other Department of Defense (DoD) installations in the area.

FTMM-25
M-19
WATER TANK

FTMM-20
PRE-1941 FORMER
MP SANITARY TREATMENT
PLANT

FTMM-57
BUILDING 138
FORMER UST
FARM

FTMM-17
M-17 FORMER
PESTICIDE
STORAGE AREA

FTMM-56
BUILDING 80
PUBLIC WORKS
OPERATIONS AND
EQUIPMENT MAINTENANCE

FTMM-16
M-16
FORMER PESTICIDE
STORAGE AREA

FTMM-18
M-18 FORMER
TRAINING AREA

FTMM-54
BUILDING 238 -
FORMER FUEL
DISTRIBUTION
FACILITY

FTMM-47
FORMER PCB
TRANSFORMER SITE

FTMM-55
BUILDING 290 -
FORMER MOTOR
POOL

FORMER PISTOL RANGE
(1935-1940PISTOL RANGE)

FTMM-53
BUILDING 283 -
FORMER UST
SITE

FTMM-18
AOC 3 - FORMER
MP SANITARY TREATMENT
PLANT

FTMM-07
M-7 BURN
AREA (INCINERATOR)

FTMM-08
M-8
LANDFILL

FORMER PISTOL RANGE

FORMER OUTDOOR FIRING RANGE
(1940-1955PISTOL RANGE)

FTMM-03 M-3 BURN AREA
AND FTMM-06 M-6 LANDFILL

FTMM-47
FORMER PCB
TRANSFORMER SITE

FTMM-05
M - 5
LANDFILL

FTMM-10
M-10
ASBESTOS
STORAGE AREA

FTMM-21
FORMER
MAIN POST
FIRING RANGE

FTMM-47
FORMER PCB
TRANSFORMER SITE

FTMM-53
BUILDING
089 - SERVICE
STATION

FTMM-04
M - 4
LANDFILL

FTMM-11
M-11
ELEVATED WATER
TANK

FTMM-14
M - 14
LANDFILL

FTMM-44
M - 15
LANDFILL

FTMM-58
BUILDING 1122
AUTO HOBBY
SHOP

01110
FORMER
PCB TRANSFORMER
SITE

FTMM-47
FORMER PCB
TRANSFORMER SITE

FTMM-66
BUILDING 886
FORMER FUEL
STORAGE AREA

FTMM-64
BUILDING 812
FORMER ENGINE
DISTRIBUTOR AREA

FTMM-13
M-13 PATHENOGENIC
WASTE INCINERATOR

FTMM-47
FORMER PCB
TRANSFORMER SITE

FTMM-09
M-9 FORMER
PCB TRANSFORMERS
SITE

FTMM-02
M - 2
LANDFILL

FTMM-47
FORMER PCB
TRANSFORMER SITE

Legend

- Streams
- Road Centerline
- Buildings
- Installation Boundary
- Potential Petroleum Product Disposal or Release Area
- Known Environmental Condition of Concern
- Potential Environmental Areas of Concern
- Potential Munitions and Explosives of Concern
- Potential Radiological Impacted Building

Storage Area, or Spill/Disposal Area
Potential PCB Imacted Equipment,

0 400 800
FEET

FIGURE 1: ENVIRONMENTAL CONDITIONS OF CONCERN: MAIN POST

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FTMM-22 WWTP LIME PIT

FTMM-23 FORMER WWTP LIME PIT

FTMM-26 FORMER PISTOL RANGE

FTMM-27 FORMER WWTP & HAZ MAT STORAGE

FTMM-25 CW-3A SUSPECTED LANDFILL

FTMM-32 FORMER HAZ WASTE STORAGE AREA

FTMM-30 WWTP LIFT STATION

FTMM-29 FORMER PCB TRANSFORMER LOCATION BUILDING 2000

FTMM-28 FORMER PESTICIDE MIXING AREA

FTMM-58 UST FARM

FTMM-31 FORMER SLUDGE DISPOSAL SITE

FTMM-63 SEWAGE LIFT STATION

TINTON AVE

REDWOOD DR

DOGWOOD DR

LOWTHER DR

MAXWELL RD

TAYLOR PL

MILL ST

LAKE DR

LAKEVIEW TER

BROAD ST

LEWIS ST

MAGILL DR

WILLOW AVE

HIGH ST

MAPLE AVE

PINEBROOK RD

KREMER AVE

CORLIES AVE

FRANKLIN AVE

CLINTON AVE

BUTTONWOOD AVE

CAROLYN CT

GRANT AVE

THROCKMORTON AVE

RAMP

DRIVEWAY

BENNET CT

FORD TER

WAKE RD

MARIVELES RD

OLONGAPO LN

SUBIC LN

BATAAN AVE

MIDWAY LN

HEMPHILL RD

CORREGIDOR RD

PARK RD

PINE BROOK RD

HELMS DR

WEDGEWOOD CIR

EATONCREST DR

STONYHILL RD

VICTORIA GARDENS

MITCHELL DR

UNKNOWN

LEGEND

- Streams
- Road Centerline
- Buildings
- Installation Boundary
- Potential Petroleum Product Disposal or Release Area
- Known Environmental Condition of Concern
- Potential Environmental Areas of Concern
- Potential Munitions and Explosives of Concern
- Potential Radiological Impacted Building

Storage Area, or Spill/Disposal Area Potential PCB Imacted Equipment,

0 300 600

FEET

FIGURE 2: ENVIRONMENTAL CONDITIONS OF CONCERN: CHARLES WOOD

Environmental Conditions

Active and Conditionally Closed Hazardous Substance and Waste Sites

Fort Monmouth has been the subject of environmental investigations, studies, and cleanup actions since the early 1980s. Research and development activities and associated support activities that occurred at FTMM during more than 80 years of operation generated a number of wastes. Disposal of some wastes occurred on site. Later, recognition that these wastes might be harmful to human health and the environment resulted in laws and regulations governing their disposal and cleanup (e.g., the Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA] and the Resource Conservation and Recovery Act [RCRA]). The Installation Restoration Program (IRP) was developed by the DoD to comply with federal guidelines for managing and controlling past hazardous waste disposal actions. The IRP is intended to address the cleanup of contamination and damage resulting from past, not current, activities. The DoD is the lead federal agency responsible for conducting environmental investigations and implementing the final cleanup plans at FTMM under the IRP.

Forty-three IRP sites have been identified at Fort Monmouth since the early 1980s. The U.S. Army has indicated that 26 of the 43 IRP sites at FTMM are considered No Further Action (NFA) sites because investigation and/or response actions at the sites are complete, and 17 of the 43 IRP sites are still active. Of the 17 active IRP sites, 15 IRP sites are located on the MP, and two IRP sites are located on the CWA.

The active IRP sites identified by the U.S. Army on the MP include:

- FTMM-02 (M-2 Landfill)
- FTMM-05 (M-5 Landfill)
- FTMM-03 (M-3 Landfill)
- FTMM-08 (M-8 Landfill)
- FTMM-12 (M-12 Landfill)
- FTMM-18 (M-18 Former Training Area)
- FTMM-53 (Building 699)
- FTMM-54 (Building 296)
- FTMM-55 (Building 290)
- FTMM-56 (Building 80)
- FTMM-57 (Building 108)
- FTMM-59 (Building 1122)
- FTMM-61 (Building 283)
- FTMM-64 (Building 812)
- FTMM-66 (Building 880)

The active IRP sites identified by the U.S. Army on the CWA include:

- FTMM-22 (CW-1 Wastewater Treatment Lime Pit)
- FTMM-58 (Building 2567)

Closed or conditionally closed IRP sites for which the U.S. Army has either requested or been granted a NFA at the MP include:

- FTMM-15 (M-15 Water Tank)
- FTMM-11 (M-11 Elevated Water Tank)
- FTMM-07 (M-7 Burning Area)
- FTMM-13 (M-13 Pathogenic Waste Incinerator)
- FTMM-19 (AOC3 Former MP Sanitary Treatment Plant)
- FTMM-20 (Pre-1941 MP Sanitary Treatment Plant)
- FTMM-06 (M-6 Burning Area)
- FTMM-16 (M-16 Former Pesticide Storage Area)
- FTMM-17 (M-17 Former Pesticide Storage Area)
- FTMM-47 (Former PCB Transformer Site)
- FTMM-09 (M-9 Former PCB Transformer Site)
- FTMM-04 (M-4 Landfill)
- FTMM-14 (M-14 Landfill)
- FTMM-21 (Former Main Post Firing Range)
- FTMM-10 (Asbestos Storage Area)

Closed or conditionally closed IRP sites for which the U.S. Army has either requested or been granted a NFA at the CWA include:

- FTMM-27 (Former CW Sanitary Treatment Plant)
- FTMM-30 (CW-8 Sewage Lift Pumping Station)
- FTMM-31 (CW-9 Sludge Disposal Site)
- FTMM-63 (Building 2603)
- FTMM-23 (CW-2 Wastewater Treatment Plant Lime Pit)
- FTMM-28 (CW-6 Former Pesticide Storage Building)
- FTMM-29 (CW-7 Former PCB Transformer Location
- FTMM-24 (CW-3 Suspected Landfill)
- FTMM-25 (CW-3A Suspected Landfill)
- FTMM-26 (CW-4 Indoor Small Arms Range)
- FTMM-32 (AOC-7 Temporary Hazardous Waste Storage Area)

It should be noted that at many of these sites, although the U.S. Army requested a NFA designation quite some time ago, the NJDEP has not yet granted the request.

Specific concerns for each of the active, closed, or conditionally closed NFA IRP sites are addressed in Table E-2. Although many of these sites have been investigated under the Army's IRP, the full extent of potential implications for redeveloping the property will need to be

continually re-evaluated as additional information becomes available. Specific concerns related to reuse include the potential need for further sampling/analysis for additional contaminants, remedies that are currently in place that are not protective for the long term if land use changes, requirements for institutional controls, and groundwater plume migration and into surface waters. Additionally, NFAs at a number of sites have either been granted or requested because no direct contact or incidental ingestion pathways currently exist. If redevelopment occurs on these sites, additional investigation and remediation may be required.

Petroleum Hydrocarbons Releases

Heating oil, diesel, gasoline, and used oils have been stored, used, or generated throughout FTMM. Petroleum products were typically stored in USTs or ASTs. Petroleum hydrocarbon releases to soil and groundwater occur when petroleum products leak or are spilled. The majority of releases of environmental concern occur when petroleum products leak from holes in tanks or are released due to failure of ancillary piping. Additional causes of release include ruptured fuel tanks on vehicles, fuel oil tank refueling spills, and ruptured hydraulic lines on heavy equipment. Improper plumbing of oil/water separators and leaks from oil/water separators also have the potential to release petroleum hydrocarbons to the environment.
Known or potential petroleum hydrocarbon releases can cause potential environmental concerns during redevelopment. The locations of current and former USTs and ASTs are presented on Figures 3 and 4.

Approximately 474 USTs at various locations throughout the installation were documented by the U.S. Army Garrison in the early 1990s. When heating oil was replaced as a major energy source by natural gas at the installation, FTMM began removing the USTs. Since 1990, approximately 97 percent of the USTs at FTMM have been removed. At the time of publication of the *BRAC 2005 Final Environmental Condition of Property Report, Fort Monmouth, Monmouth County, New Jersey*, 13 USTs were still actively being used at FTMM (10 on the MP and 3 on the CWA). The USTs still in use range in size from 6,000 to 10,000 gallons each and are used to store diesel and unleaded gas for use in government vehicles and emergency generators. All 13 tanks are equipped with leak detection monitoring, corrosion protection, and spill and overfill protection as required by U.S. Environmental Protection Agency and NJDEP regulations.

In addition to the active USTs, a total of 36 ASTs (24 on the MP and 12 on the CWA) are also actively being utilized for installation fuel storage or by installation repair and maintenance shops to facilitate the proper collection and temporary storage of generated used oils. These tanks range in size from 125 gallons to 1,000 gallons. The active ASTs are inspected annually in compliance with the FTMM Spill Prevention, Control, and Countermeasures Plan.

Munitions and Explosives of Concern

There are sixteen active ranges at FTMM in addition to six closed/inactive ranges. Of the sixteen active ranges, only one has been used for munitions training. This active range is a new state-of-the-art indoor range. The remaining fifteen ranges have been reserved as potential range locations by the U.S. Army for training purposes, but have reportedly never been used for such a purpose. Of the six closed/inactive ranges present at FTMM, three closed/inactive ranges were

recommended for additional evaluation of Munitions and Explosives of Concern (MEC) in the *U.S. Army's 2006 Historical Records Review* and FTMM has investigated one former pistol range under the IRP Program. The four locations that have been investigated or that have been recommended for additional investigation include the Former Outdoor Firing Range (1940-1955 Pistol Range), the Former Pistol Range (1935-1940 Pistol Range), and the former skeet range on the MP. MEC concerns also exist in the vicinity of Building 2537, which is the location of a former Indoor Pistol Range on the CWA property. The locations of sites with potential MEC concerns are shown on Figures 1 and 2.

Potential Radiological Contamination

The presence of radioactive material (RAM) with the potential to have produced radiological contamination at FTMM has been predominantly limited to certain areas and functions of the installation. Historically, laboratory R&D in the areas of radio and electronics, use of vacuum tubes and radium dials, ionizing radiation-producing machines, and military support equipment such as night vision goggles that contain radioactive commodities have been among the activities most commonly using RAM. Equipment containing RAM has also been used in chemical and explosives detectors operated by personnel working in security entrance areas, postal facilities, shipping areas, and emergency responder personnel throughout FTMM; however, this equipment involves the use of sealed sources rather than research-type materials. Facilities at FTMM that have been identified by the U.S. Army as potentially impacted from historical use of RAM include Buildings 275, 283, 292, and 2540. Potential contaminated media in these facilities include building interiors and surfaces, including work benches, storage cabinets, disposal sinks, sumps, and ancillary piping. Buildings 1075, 2700, and 2075 may also potentially contain sumps and ancillary piping contaminated with RAM. Additionally, materials in the lime treatment pit located outside of Building 2700 and in the soil surrounding the pit have the potential to be contaminated with RAM.

Presently, a research laboratory in Building 2540 in the CWA is the only site to regularly use and store RAM as part of the R&D activities performed on site. A designated storage area is set aside for drums containing material awaiting proper disposal including, tritium exit signs removed from FTMM buildings, smoke alarms containing RAM, and other instruments with associated check sources. These items are periodically taken to Wright Patterson Air Force Base for disposal/recycling.

Underground Utilities

Throughout FTMM, it is likely that there are several underground utilities that are no longer in use and have been abandoned in place. Although no longer in operation, FTMM previously operated on-site Sewage Treatment Plants at the MP and the CWA. Although the Sewage Treatment Plants have been investigated under the IRP, leaks from the sanitary sewer lines leading from the buildings on FTMM to the Sewage Treatment Plants are potential sources of contamination to underlying soil and groundwater, which have not yet been systematically investigated. Previous operations that potentially generated contaminated sanitary sewer effluent at FTMM included electrochemical research, growing and shaping of crystals, various plating operations, mixing of magnetic powders, machining, welding, spray painting, use of solvents for equipment cleaning, and other miscellaneous laboratory operations utilizing standard laboratory

chemicals. Additionally, sanitary sewer lines leading from Building Nos. 275, 283, 292, and 1075, 2540, 2700, and 2705, which are potentially contaminated with RAM have not yet been assessed for contamination.

Steam lines that ran underground from central heating plants to residential units and other buildings at FTMM may also exist. If these steam lines are still in place and the lines are wrapped with asbestos containing material (ACM) for insulation, they will require special handling and offsite disposal if disturbed during redevelopment activities. Finally, due to the age of FTMM, many of the water supply lines are likely constructed of transite (an asbestos and concrete composite) pipe. If these pipes are not reused during redevelopment or are disturbed during construction activities, they may require special handling and offsite disposal as ACM.

It is possible that industrial-type waste generated during R&D activities may have been disposed of down drains into the sewer system at multiple locations on FTMM. Past disposal practices of this nature can contaminate sediment within the sewer and provide a pathway for potential release by sanitary sewer overflow during peak rainfall events. Sanitary sewer overflow can contribute to contamination of environmental media at storm sewer discharge points. Additionally, storm sewers may transport environmental contaminants from their origin during rain events. Storm sewer discharge points can be collection areas for contaminants and may require remedial investigation prior to redevelopment.

Asbestos and Lead-Based Paint

Due to the age of the buildings at Fort Monmouth, asbestos and lead-based paint are likely present in buildings onsite. Comprehensive asbestos and lead-based paint surveys suitable for demolition purposes have not been performed on the majority of the buildings. A number of asbestos and lead-based paint surveys have been conducted at Fort Monmouth. This information should not be viewed as comprehensive and should be used with caution, because the surveys were only conducted on a representative number of buildings and did not always include walk through inspections of the units. Existing survey information is available in an inventory maintained by FTMM. Generally, the U.S. Army does not pay for the abatement of asbestos and lead-based paint in buildings being transferred. The cost of abatement and proper disposal of these materials during redevelopment can be significant.

PCB-Impacted Equipment, Storage, Spills, and Disposal Areas

A number of sites where PCB-containing equipment was used, or storage, spills, and disposal areas used have been identified at FTMM. By 2003, all PCB-containing equipment (i.e., equipment with oil containing more than 50 parts per million PCBs) had been removed from FTMM. The locations at which PCB-impacted equipment was stored, as well as PCB spill and disposal areas are being addressed by the US Army under the IRP. Locations of known and potential PCB-impacted equipment storage, spill and disposal areas are shown on Figures 1 and 2.

Pesticide and Herbicide Storage Areas, Mixing Areas, and Site-Wide Application

Throughout the operational history of FTMM, pesticides and herbicides have been stored, prepared, and applied throughout the base. Known historic pesticide storage and/or mixing locations include Buildings T-65 and 498 on the MP and Building 2044 on the CWA. These locations have been investigated by the U.S. Army under the IRP. Soil samples collected in the vicinity of these buildings indicate that pesticide compounds were found in excess of applicable state direct contact standards at Buildings 498 and 2044. Additionally, previous pesticide container disposal practices included the disposal of unwashed containers in the FTMM landfills. Previous pesticide use along railroad lines and fences for weed control is also likely. Pesticides are currently mixed and stored in Buildings 2070 and 2071 on the CWA property. A systematic, site-wide assessment of potential pesticides and herbicides has not been conducted.

Preliminary Conclusions

Continued evaluation of potential environmental concerns at FTMM is critical. In the *BRAC 2005 Final Environmental Condition of Property Report, Fort Monmouth, Monmouth County, New Jersey*, in addition to sites being actively investigated under the IRP, the U.S. Army identified additional potential environmental concerns that they have not yet formally investigated, including former coal storage areas, areas where vapor intrusion may occur in buildings, former printing/photo processing operations, former painting/surface coating operations, medical/dental/veterinary services operations, and maintenance shops. Areas on both the MP and CWA in which these operations historically occurred are identified in Figures 1 and 2 as potential environmental areas of concern. Review of additional, recent quantitative data on active investigation and remediation sites will be necessary to better define the nature and extent of many of the sites identified in this technical memo. Many of the potential environmental concerns identified in this memo may not result in environmental constraints; however, field investigation, including the sampling of soil, sediment, surface water, or groundwater, will be necessary to make this determination.

As current quantitative environmental information is obtained (i.e., field investigation and analytical data), it will be used to help guide reuse planning activities, including appropriate land uses, budgeting considerations, potential schedule impacts, and land use controls. Final remediation requirements will be determined after the land use plan is developed and investigation data is obtained. Should economic studies and market analyses indicate a contaminated area is a prime location for development, administrative controls, engineering controls, and additional investigation may be used to mitigate contamination or reduce environmental constraints in the event full-scale remediation is found to not be cost-effective.

Due to the potential for unknown MEC and other environmental contamination to exist throughout the installation, use of a Materials Management Plan and a Health and Safety Plan during construction activities is strongly recommended. If MEC or potentially contaminated soil, sediment, or water is observed during construction or renovation activities, the procedures outlined in the Materials Management Plan should be followed.

LEGEND

- Streams
- Road Centerline
- Buildings
- Installation Boundary

! CurrrentAST Location
! Current UST Location
! Former UST Location

0 400 800
FEET

FORT MONMOUTH REUSE AND REDEVELOPMENT PLAN

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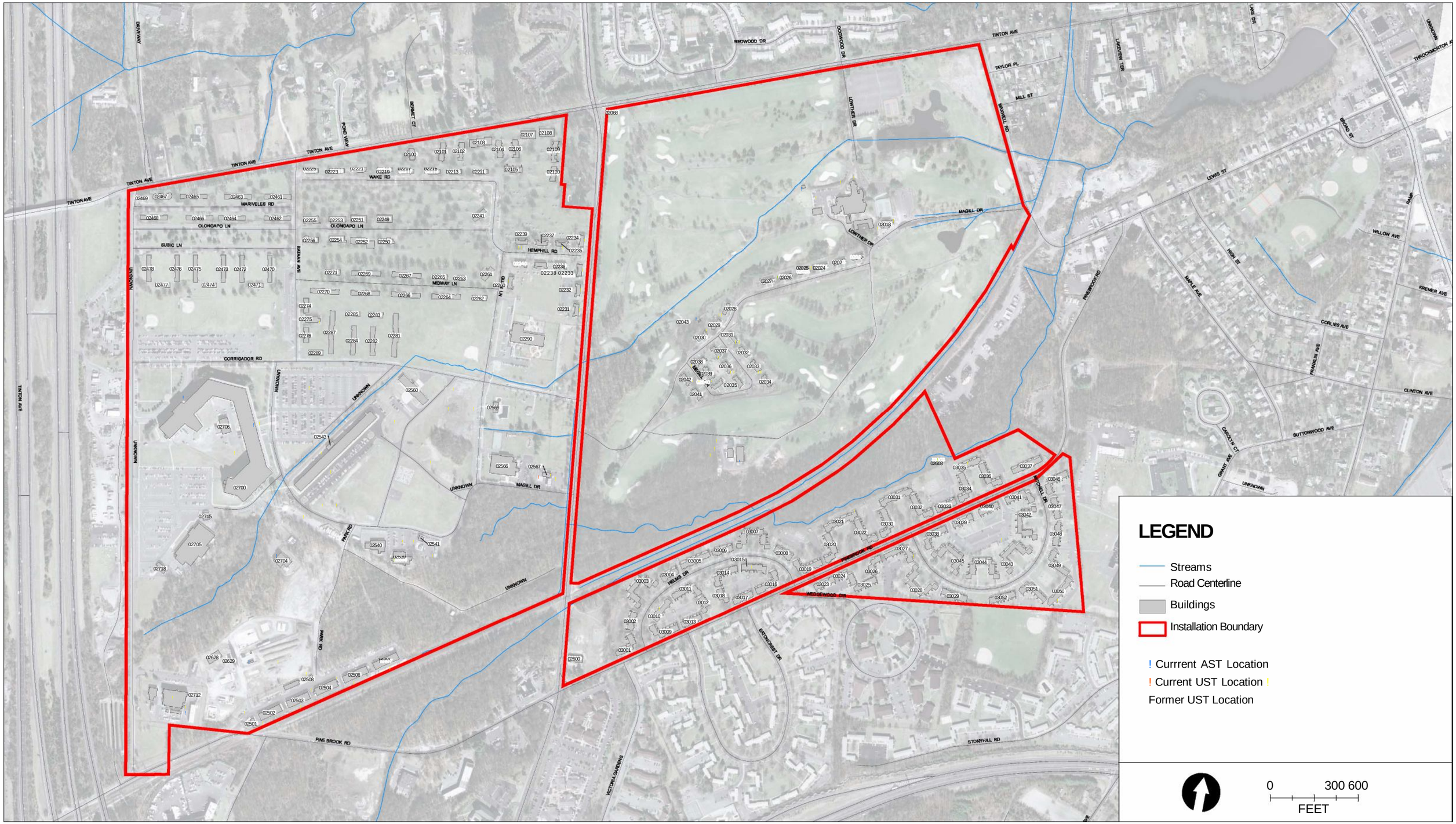
FIGURE 3 UNDERGROUND AND ABOVE GROUND STORAGE TANK LOCATIONS - MAIN POST



LEGEND

- Streams
- Road Centerline
- Buildings
- Installation Boundary

! Currrent AST Location
! Current UST Location !
Former UST Location

0 300 600
FEET

FORT MONMOUTH REUSE AND REDEVELOPMENT PLAN

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FIGURE 4 UNDERGROUND AND ABOVE-GROUND STORAGE TANK LOCATIONS - CHARLES WOOD

TABLE E-1. REFERENCE DOCUMENTS

Document Number	Date Published	Author	Title and/or Subject
FM01	01/29/2007	U.S. Army	Environmental Condition of Property Report /ECP
FM02	01/2007	Baltimore District	Final Historical Site Assessment and Addendum Environmental Condition of Property Report/ECP Appendices and Historical
FM03	04/12/2004	Directorate of Public Works	Final Remedial Action Progress Report 2nd Quarter 2000 through 3rd Quarter 2002 M-2 Landfill Site
FM04	08/19/2005	Directorate of Public Works	Final Remedial Action Progress Report M-2 Landfill Site
FM05	02/23/2004	Directorate of Public Works	Final Remedial Investigation Report for Near- Surface Soils M-2 Landfill Soils M-2 Landfill Site
FM06	01/2001	U.S. Army	Remedial Investigation Report & Remedial Action Workplan M-2 Landfill
FM07	04/30/2004	Directorate of Public Works	Final Remedial Action Progress Report 2nd Quarter 2000 through 3rd Quarter 2002 M-3 Landfill Site
FM08	07/2000	U.S. Army	Remedial Action Work Plan Landfill M-3 V. 1 of 5 Report, Figures, Tables, Appendix A, Appendix B
FM09	03/03/2004	Directorate of Public Works	Final Remedial Investigation Report for Near- Surface Soils M-3 Landfill Site
FM10	02/04/2004	Directorate of Public Works	Final Remedial Investigation Report and Sediment Quality Evaluation M-3 Landfill Site
FM11	01/06/2005	Directorate of Public Works	Final Remedial Investigation Report M-4 Landfill Site
FM12	03/09/2004	Directorate of Public Works	Final Remedial Investigation Report for Near-Surface Soils M-4 Landfill Sites
FM13	02/04/2004	Directorate of Public Works	Final Remedial Investigation Report and Sediment Quality Evaluation M-4 Landfill Site
FM14	01/06/2005	Directorate of Public Works	Final Remedial Investigation Report M-4 Landfill Site
FM15	03/03/2004	Directorate of Public Works	Final Remedial Investigation Report for Near-Surface Soils M-4 Landfill Site
FM16	09/07/2005	Directorate of Public Works	Final Remedial Action Progress Report M-5 Landfill Site
FM17	01/2000	U.S. Army	Remedial Action Work Plan Landfill M-5 V. 1 of 4 Report, Figures, Tables, Appendix A, Appendix B and C (Part 1)
FM18	04/15/2003	U.S. Army	M-5 Landfill Remedial Action Progress Report Hydrogen Release Compound Injection/ Long Term Monitoring Program 4th Quarter 1999 through 3rd Quarter 2002
FM19	03/15/2003	Directorate of Public Works	Final Remedial Investigation Report for Near-Surface Soils M-5 Landfill Site
FM20	01/26/2004	Directorate of Public Works	Remedial Investigation Report and Sediment Quality Evaluation M-5 Landfill Site
FM21	05/27/2004	Directorate of Public Works	Final Remedial Action Progress Report 2nd Quarter 2000 through 3rd Quarter 2002 M-8 Landfill Site
FM22	12/02/2005	Directorate of Public Works	Final Remedial Action Progress Report 4th Quarter 2002 through 3rd Quarter 2004 M-8 Landfill Site
FM23	09/2002	U.S. Army	Remedial Action Work Plan Landfill M-8
FM24	03/16/2004	Directorate of Public Works	Final Remedial Investigation Report for Near Surface Soils M-8 Landfill Site
FM25	02/03/2003	U.S. Army	Appendix F Ground Water Classification Exception Area Fact Sheet Landfill M-12
FM26	09/2003	Directorate of Public Works	Final Remedial Investigation Report M-12 Landfill Site

TABLE E-1. REFERENCE DOCUMENTS

Document Number	Date Published	Author	Title and/or Subject
FM27	10/15/2003	Directorate of Public Works	Final Remedial Investigation Report for Near Surface Soils M-12 Landfill Site
FM28	10/15/2003	Directorate of Public Works	Final Remedial Investigation Report and Sediment Quality Evaluation M-12/M-14 Landfill Site
FM29	08/12/2005	Directorate of Public Works	Final Remedial Investigation Report M-14 Landfill Site
FM30	03/17/2004	Directorate of Public Works	Final Remedial Investigation Report for Near Surface Soils M-14 Landfill Site
FM31	10/01/2003	Directorate of Public Works	Final Remedial Investigation Report M-18 Landfill Site
FM32	03/17/2003	Directorate of Public Works	Final Remedial Investigation Report for Near Surface Soils M-18 Landfill Site
FM33	02/24/2004	Directorate of Public Works	Final Remedial Investigation Report and Sediment Quality Evaluation M-18 Landfill Site
FM34	02/03/2004	U.S. Army	Appendix F Groundwater Classification Exception Area Fact Sheet M18-Landfill Site
FM35	09/2003	U.S. Army	CTT Ranges, UXO-DMM-MC Sites/ Final Closing transferring and transferred range
FM36	05/1980	U.S. Army	Installation Assessment of Fort Monmouth/ Haz Waste
FM37	12/1993	Directorate of Public Works	Final Investigation of Suspected Hazardous Waste Site at Fort Monmouth/ Haz Waste
FM38	01/13/2005	Handex	Letter regarding Remedial Action Progress Report, April 2003 –September 2004 Charles Wood Area, Remediation System/ Site Restoration
FM39	11/2004	Handex	Remedial Action Progress Report V. I of III April 2002 through March 2003/ Site Restoration
FM40	06/1997	U.S. Army	Remedial Action Work Plan Wastewater Treatment Lime Pit/ CW-1 Charles Wood Area/ Site Restoration
FM41	03/12/2001	U.S. Army	Soil and Groundwater Investigation Report U. S. Army/ Site Restoration
FM42	03/07/2005	Directorate of Public Works	Final Remedial Investigation Report CW-2 Wastewater Treatment Lime Pit Site/ Site Restoration
FM43	01/07/2005	Directorate of Public Works	Final Remedial Investigation Report CW-3A Landfill Site/ Site Restoration
FM44	03/04/2004	Directorate of Public Works	Final Remedial Investigation Report for Near Surface Soils CW-3A Landfill Site/ Site Restoration
FM45	02/10/2004	Directorate of Public Works	Final Remedial Investigation Report and Sediment Quality Evaluation CW-3A Landfill Site/ Site Restoration
FM46	09/09/2004	Directorate of Public Works	Final Remedial Action Report Site CW-4 / Site Restoration
FM47	01/14/2005	Directorate of Public Works	Final Remedial Investigation Report CW-6 Former Pesticide Storage Building/ Site Restoration
FM48	08/03/2004	Directorate of Public Works	Final Remedial Action Report CW -7 PCB Site/ Site Restoration
FM49	02/09/2004	Directorate of Public Works	Final Remedial Investigation Report and Sediment Quality Evaluation Pre 1941 Sewage Treatment Plant Site/ Site Restoration
FM50	01/2006	U.S. Army	Final Historical Records Review Fort Monmouth/ Site Restoration
FM51			
FM52			
FM53			

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Table E-2. Summary of Known Information Related to the Fort Monmouth IRP Sites

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MP	RI w/ recommendation to be submitted	1	AST1	FTMM-15	M-15 Water Tank	1941 -	4,4'-DDE, 4,4'-DDT, Cd, Pb, Zn	500,000 gallon AST used for potable water storage.			1999 - Soil excavation and removal.	2007 - Submit RA report recommending NFA.	Building 486
MP	NJDEP NFA 1994	2	AST2	FTMM-11	M-11 Elevated Water Tank	1940s -	Pb	Used to boost pressure in water distribution system for fighting fires.					Building 557
MP	Active	3	AST3	FTMM-66	Building 886 Former Fuel Storage Area	1956-	TPH	1 - 250,000 gallon AST for #2 fuel oil. 1 - 1,000 gallon steel UST for fuel oil.		2002 - SI with 48 geoprobe borings. 2003 - Installed 5 MWs to delineate plume.	1970s - AST removed. 2002 - Free product removal initiated. 2003 - Excavation and removal of contaminated soil (4,000 tons). 2003 - Installed automated free product recovery system, but was not effective due to too little free product in subsurface.	MNA.	Up to 5" free product historically observed.
MP	NJDEP NFA 1994	4	Incinerator 1	FTMM-07	M-7 Burning Area	? - 1990		Burnt classified documents.				1993 - Incinerator dismantled.	Building 697 Incinerator.
MP	NJDEP NFA 1994	5	Incinerator 2	FTMM-13	M-13 Pathogenic Waste Incinerator	1975 - 1992		Used to burn medical waste generated at hospital.	dioxins - if any solvents were also burned?				Building 1076. Patterson Army Health Clinic
MP	Active	6	Maintenance Yard	FTMM-56	Building 80	1984-1994	Benzene, chlorobenzene, 4,4'-DDD, Cd, Pb	Fiberglass UST for #2 fuel oil. Public Works operations and equipment maintenance.			2005 - RI submitted and NFA requested from NJDEP, awaiting response.	MNA.	Contamination thought to be from site activities prior to installation of UST.
MP	NJDEP NFA 1996	7	STP 1	FTMM-19	AOC 3 - Former MP Sanitary Treatment Plant	1941 - 1975	None detected	Built for 0.7 MGD flow, typical WWTP.			1981 - Sludge and liquid supernatant removed and facility cleaned and disinfected.		
MP	NFA pending NJDEP approval	8	STP 2	FTMM-20	Pre-1941 Former MP Sanitary Treatment Plant	Unknown	As, Cd, Cr, Zn	Typical WWTP.		2000 - RI determined metals concentration to be consistent with background values.	2004 - Submitted RI report requesting NFA from NJDEP, awaiting response.		
CW	NJDEP NFA 1996	9	STP 3	FTMM-27	CW-5 Former CW Sanitary Treatment Plant	1942 - 1975		Built for 0.8 MGD flow, typical WWTP.			1981 - Sludge and liquid supernatant removed and facility cleaned and disinfected. 1983 - Facility demolished. 1993 - Youth Facility constructed on site		No compounds detected greater than NJDEP Direct Contact Soil Cleanup Criteria or Sediment Criteria.
CW	NJDEP NFA 1994	10	STP 4	FTMM-30	CW-8 Sewage Lift Pumping Station	1954 - Present		Wastewater lift station connecting Wherry Housing to FTMM sewage collection system.		1990 - Oil sampled, PCB = 223,091 ppm. 1996 - RI to delineate PCB contamination.	1990 - PCB class transformer removed from service and replaced. 1998 - PCB soils excavated and disposed offsite. 2004 - RI report submitted to NJDEP recommending NFA, awaiting response.		Building 2000.
CW	NJDEP NFA 1996	11	Surface Disposal Area	FTMM-31	CW-9 Sludge Disposal Site	1940s - 1981		Sludge from MP and CW STPs was stored in area before being used as soil conditioner and fertilizer on golf course.		SI found no compounds detected greater than NJDEP Direct Contact Soil Cleanup Criteria.			Southwest section of golf course.
MP	Active	12	UST Farm 1	FTMM-53	Building 699 - Service Station		BTEX, MTBE	6 - 10,000 gallon USTs	Pb	1984 - 0.33 gal/min leak identified in 2 tanks.	1989 - Replaced line with leak identified in 1984. 1989 - Pump/Treat system installed. 2001 - Air sparge/SVE system added.	Army expects remediation system shutdown in 2008, then 2 years of LTM.	

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MP	Active	13	UST Farm 2	FTMM-54	Building 296 - Former Fuel Distribution Facility	1940s-	BTEX, Pb	10 - 1,000 gallon USTs			1993 - Fuel distribution system and source of contamination removed.	NFA is requested - No details in ECP on NJDEP response. MNA.	RI combined with Building 209 and M-18 Landfill.
MP	Active	14	UST Farm 3	FTMM-55	Building 290 - Former Motor Pool		BTEX, Pb	2 - ??? gallon USTs		1994 - Tanks removed and leaks reported to NJDEP. 1996 - Discovered GRO in soil near removed UST area. Soil TPH > 17,000 ppm.	1997? - Contaminated soil removal action.	NFA is requested - No details in ECP on NJDEP response. MNA.	RI combined with Building 296 and M-18 Landfill.
MP	Active	15	UST Farm 4	FTMM-57	Building 108	-1993	Benzene, chlorobenzene, Pb, As	5 - ??? Gallon USTs.			1993- Removed 5 USTs. 2004 - Requested NFA from NJDEP, still awaiting response.	MNA.	
MP	Active	16	UST Farm 5	FTMM-64	Building 812 Former Gasoline Distribution Area	1947-1971	Benzene, xylene, PCE, TCE, DCE, VC, Pb	No info in ECP on tanks or removal.		1999 - SI with 5 geoprobe borings. 1999 - RI with 164 geoprobe borings. 2000 - Installed 14 MWs to delineate plume.	2001 - HRC injection for groundwater remediation.	MNA.	Plume delineated horz and vert.
CW	Active	17	UST Farm 6	FTMM-58	Building 2567	-Present	Benzene, xylenes, MTBE, 1,2-DCE, Pb	Active gasoline service station with 5 fiberglass USTs		2004 - RI Geoprobe investigation.	1993 - 5 single-wall steel USTs removed and replaced with double-wall fiberglass USTs, and 1,000 cy of contaminated soil excavated and removed during system replacement.	MNA. 2007/2008 - ORC injections. 2011 - Anticipated closeout.	
MP	Active	18	UST 1	FTMM-61	Building 283		BTEX, Pb	1 - 3,000 gallon steel UST for gasoline.	MTBE		1997 - UST removed and 400 cy contaminated soil excavated and removed. 2006 - Submitted ORC work plan to NJDEP.	ORC injection.	Benzene @ 2,238 ppb (GW std = 1 pbb) Ethyl benzene @ 797 ppb (GW std = 700 ppb) Toluene @ 1,084 ppb (GW std = 1,000 pbb) Pb @ 22 ppb (GW std = 10 pbb)
CW	NFA pending NJDEP approval	19	UST 2	FTMM-63	Building 2603 Gasoline UST		Benzene, ethyl benzene, xylene, Pb	Sewage lift station. 1 - 275 gallon steel UST		1999 - 4" MW installed. 2 rounds of samples have been collected with no exceedences and Army believes sufficient data has been collected to request a groundwater NFA. RI report requesting NFA has been prepared.	1998 - Removed steel UST, 225 cy of contaminated soil was excavated and removed.		Building 2603. "Possible the site was impacted from an older UST than the 275 gallon UST or from an aboveground gasoline spill." -ECP.
MP	NFA	20	Burn Area	FTMM-06	M-6 Burning Area			open air, wood burning pits in M-3 Landfill area.			Incorporated into FTMM-03.		No associated buildings.
CW	Active	21	Industrial Discharge 1	FTMM-22	CW-1 Wastewater Treatment Plant Lime Pit	1952 - 1992?	PCE, TCE, 1,2-DCE	Treated corrosive wastes generated from laboratory activities. Groundwater exceeded standards for organics.		1992 - Sampled sludge in pit. 1996 - Passive gas survey. 1996 - Installed 3 MWs.	1993? - Cleanup of pit generated 92 55-gallon drums of RCRA waste. 1998 - Air sparging/SVE system installed. 2002 - 2 groundwater recovery wells installed for pump & treat system (GWTS). 2002 - Lime pit demolished and remaining limestone removed and disposed. 2005 - GWTS turned off.	2007/2008 - HRC injection. 2010 - Goal for groundwater closure.	Building 2700 - Meyer Center.
CW	NFA pending NJDEP approval	22	Industrial Discharge 2	FTMM-23	CW-2 Wastewater Treatment Plant Lime Pit	1952 - 1992?	PCE, As, Pb	Second wastewater treatment lime pit next to Meyer Facility. Treated corrosive wastes generated from laboratory activities. Groundwater exceeded standards for organics.		1992 - Sampled sludge in pit. 1995 - Passive gas survey, results were negative. 1996 - Installed 3 MWs.	1993? - Cleanup of pit generated 91 55-gallon drums of RCRA waste. 2002 - Lime pit demolished and remaining limestone removed and disposed.	RI report requesting NFA submitted to NJDEP, awaiting response.	Building 2700 - Meyer Center.
MP	RA report w/ NFA recommendation to be submitted	23	Pesticide Shop 1	FTMM-16	M-16 Former Pesticide Storage Area	1939 - late 1950s	Pesticides	Pesticide management practices performed onsite until operation was moved to Building 65 in the late 1950s.		SI phase identified 10 pesticides	1999 - Excavated and removed contaminated soil.	2007 - RA report to be submitted to NJDEP with NFA recommendation.	Building 498
MP	NJDEP NFA 1994	24	Pesticide Shop 2	FTMM-17	M-17 Former Pesticide Storage Area	late 1950s - early 1980s	Chlordane	Pesticide management practices performed onsite until operation subcontracted offsite in the early 1980s.		1990 - 16 soil samples collected.			Former Building 65

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Location	Army's Status	Site	ECP Classification	FTMM ID	ECP Site Description	Dates of Operation	Contaminants of Concern	Wastes Disposed/Used at Site	Additional Potential Contaminants	Previous Studies	Previous Actions	Planned Actions	Remarks
CW	NFA pending NJDEP approval	25	Pesticide Shop 3	FTMM-28	CW-6 Former Pesticide Storage Building	-2001	Pesticides, benzene, As	Pesticides and herbicides were stored and mixed at the facility.		2002 - As of 2002, 15 consecutive quarterly groundwater sampling rounds had been performed. 2005 - RI report submitted to NJDEP requesting NFA, awaiting response.			Southwest corner of golf course. Buildings 2044, 2070, 2071, 2046.
MP	Active	26	Spill Site Area 1	FTMM-59	Building 1122		TCE, TPH	1 - ??? gallon single wall steel UST for #2 Fuel Oil. Self help vehicle repair shop. 1 - ??? gallon UST with no info.		2004 - Geoprobe investigation.	Late 1980s - Removed 1st UST. 1994 - Removed 2nd UST. 2004 - Well sump installed to remove free product, no free product recovered to date.	MNA	
MP	NJDEP NFA (Unknown date)	27	Spill Site Area 2	FTMM-47	Former PCB Transformer Sites		PCB	PCB transformer locations on Main Post: Buildings - 292, 686, 718, 1002, 1004, 1208, 1209, 1220.					Elevated PCB concentrations found in the soil near transformers at Buildings - 1002, 1208, 1209, where the transformers are in active use. PCB contaminated media will be removed when transformers are replaced or removed from service.
MP	NJDEP NFA 1994	28	Spill Site Area 3	FTMM-09	M-9 Former PCB Transformers Site		PCB	Transformers in Buildings 1150 and 1152.		19910 - PCB survey results showed all transformers to have < 50 ppm PCB and under TSCA those are classified non-PCB.			Buildings 1150 and 1152.
CW	NFA pending NJDEP approval	29	Spill Site Area 4	FTMM-29	CW-7 Former PCB Transformer Location		PCB	Transformer located near front of Building 2000 - Officer's Club.		1990 - Oil sampled, PCB = 223,091 ppm. 1996 - RI to delineate PCB contamination.	1990 - PCB class transformer removed from service and replaced. 1998 - PCB soils excavated and disposed offsite. 2004 - RI report submitted to NJDEP recommending NFA, awaiting response.		Building 2000.
MP	Active	30	Contaminated Fill Area	FTMM-18	M-18 Former Training Area		Benzene, As, Pb, 4,4'-DDD	Training area where diesel and gasoline generators and military vehicles were used. Numerous spills have occurred at the site. Waste material (primarily construction debris) is buried at the site.		SI - 9 soil borings and 2 MW installed. Enhanced SI - 3 additional MW installed.	NFA recommendation made to NJDEP on cover material, awaiting response.	MNA	4.1 acres - partially paved, partially sand.
MP	Active	31	Landfill 1	FTMM-02	M-2 Landfill	1964-1968	PCE, TCE, Chlorobenzene, benzene, As, Pb, Cd	Construction debris, scrap metal, ACM, soot/boiler scale, oil spill debris, oil filters, unwashed haz waste containers, incinerator ash, photographic chemicals, WWTP sludge, batteries, florescent tubes, electronic components.	dioxins		1999 - RA to repair creek bank erosion. 2001 - ORC injection program for groundwater.	Army recommended NFA for landfill cover material. Continue ORC injection until 2008. LTM until base closure in 2011.	6.5 acres. Debris exposed on Mill Creek bank.
MP	Active	32	Landfill 2	FTMM-03	M-3 Landfill	1959-1964	PCE, VC, Chlorobenzene, benzene, Pb, Cd	Construction debris, scrap metal, ACM, soot/boiler scale, oil spill debris, oil filters, unwashed haz waste containers, incinerator ash, photographic chemicals, WWTP sludge, batteries, florescent tubes, electronic components.	dioxins			Army recommended NFA for landfill cover material - expects by 2011. MNA for groundwater - NJDEP approved.	5.9 acres.
MP	Active	33	Landfill 3	FTMM-05	M-5 Landfill	1952-1959	PCE	Construction debris, scrap metal, ACM, soot/boiler scale, oil spill debris, oil filters, unwashed haz waste containers, incinerator ash, photographic chemicals, WWTP sludge, batteries, florescent tubes, electronic components.	dioxins		HRC injection program for groundwater.	Army recommended NFA for landfill cover material - expects by 2011. Continue HRC until 2008.	3.2 acres. PCE plume delineated horz and vert.
MP	Active	34	Landfill 4	FTMM-08	M-8 Landfill	1962-1981	Chlorobenzene, benzene, PCBs	Construction debris, scrap metal, ACM, soot/boiler scale, oil spill debris, oil filters, unwashed haz waste containers, incinerator ash, photographic chemicals, WWTP sludge, batteries, florescent tubes, electronic components.	dioxins			Army recommended NFA for landfill cover material. MNA.	7.2 acres.
MP	Active	35	Landfill 5	FTMM-12	M-12 Landfill	Unknown	AS, Pb, Hg, Cd	Construction debris, scrap metal, ACM, soot/boiler scale, oil spill debris, oil filters, unwashed haz waste containers, incinerator ash, photographic chemicals, WWTP sludge, batteries, florescent tubes, electronic components.	dioxins		1999 - RA to repair brook bank erosion. 2003 - GW flow and transport model.		1.4 acres. Debris exposed on Husky Brook bank.
MP	NFA pending NJDEP approval	36	Landfill 6	FTMM-04	M-4 Landfill	1955 - 1956	Pb	Construction debris, scrap metal, ACM, soot/boiler scale, oil spill debris, oil filters, unwashed haz waste containers, incinerator ash, photographic chemicals, WWTP sludge, batteries, florescent tubes, electronic components.	dioxins	As of 2002, 15 consecutive quarterly groundwater monitoring rounds.		Requested NFA from NJDEP, awaiting response.	1.4 acres.

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MP	NFA pending NJDEP approval	37	Landfill 7	FTMM-14	M-14 Landfill	1965 - 1966	Pb, As, 1,2-DCE	Construction debris, scrap metal, ACM, soot/boiler scale, oil spill debris, oil filters, unwashed haz waste containers, incinerator ash, photographic chemicals, WWTP sludge, batteries, florescent tubes, electronic components.	dioxins	2001 - RA to repair brook bank erosion. As of 2002, 11 consecutive quarterly groundwater monitoring rounds.		Army recommended to NJDEP an NFA for cover and groundwater, awaiting response.	6.9 acres. Debris exposed on Husky Brook bank.
CW	NJDEP NFA 1998	38	Landfill 8	FTMM-24	CW-3 Suspected Landfill	1940s		Administrative wastes and wood debris. 1980s and 1990s used as surface disposal area for construction debris.		1997 - 29 test pits found native soil and no buried waste.	1994/1995 - Removed construction debris.		1 acre. 2600 area.
CW	NFA pending NJDEP approval	39	Landfill 9	FTMM-25	CW-3A Suspected Landfill		Benzo(a)antrhacene, benzo(a)pyrene, benzene, Pb	Construction debris, coal ash.		1997 - Several test pits found debris. 1998 - 4 MW installed and soil samples taken. 2002 - as of 2002, 8 consecutive quarterly ground water samples had been collected. 2004 - Surface soil RI report requesting NFA submitted, awaiting response. 2005 - Subsurface soil and groundwater RI report requesting NFA submitted, awaiting response.			North of Building 2707 - Pulse Power facility. Not sure justification of NFA request.
CW	NFA pending NJDEP approval	40	Pistol Range 1	FTMM-26	CW-4 Indoor Small Arms Range	1945 -	Pb	Spent rounds and shells (small arms) were visible on surface.			1997 - RA removed rounds, casings, and contaminated soil 2005 - RA report requesting NFA submitted to NJDEP, awaiting response.		Building 2566 - Youth Activity Center
MP	NJDEP NFA 1994	41	Pistol Range 2	FTMM-21	Former Main Post Firing Range	late 1930s - early 1950s		Outdoor pistol range.					Building 1220
MP	NJDEP NFA 1994	42	Storage Area 1	FTMM-10	M-10 Asbestos Storage Area			Metal shed with concrete pad floor was used to store new cans of spray-on asbestos for use on base.					Building 1220
CW	NJDEP NFA 1996	43	Storage Area 2	FTMM-32	AOC-7 Temporary Hazardous Waste Storage Area	6 months in 1987		Sandy lot, approximately 1 acre, 7' fence surrounds site. Hazardous waste was stored in drums		No COCs detected greater than NJDEP Direct Contact Soil Cleanup Criteria during SI.			

Notes:

NJDEP-approved NFA

NFA requested/recommended, awaiting NJDEP approval