



PROPOSED PLAN FOR NO FURTHER ACTION ENVIRONMENTAL CONDITION OF PROPERTY SITES PARCEL 71 PCB AREA, FTMM-59 (PARCELS 41 AND 43), PARCEL 70, PARCEL 82, PARCEL 97, AND UST 490

Fort Monmouth, Oceanport, Monmouth County, New Jersey

October 2022

1 INTRODUCTION

2 The U.S. Army (Army) is presenting this **Proposed**
3 **Plan*** for the public to review and comment
4 regarding **no further action (NFA)** proposed for six
5 sites at Fort Monmouth (FTMM) in Oceanport,
6 Monmouth County, New Jersey: Parcel 71 PCB
7 Area (also referred to as the Gosselin Area),
8 FTMM-59 (Parcels 41 and 43), Parcel 70, Parcel 82,
9 Parcel 97, and Underground Storage Tank (UST)
10 490. The Army is the lead agency for FTMM in
11 accordance with **Comprehensive Environmental**
12 **Response, Compensation and Liability Act**
13 **(CERCLA, 42 U.S.C. §§9601 et. seq.)** and Executive
14 Order 12580. New Jersey Department of
15 Environmental Protection (NJDEP) is the state
16 support agency under the **National Oil and**
17 **Hazardous Substances Pollution Contingency Plan**
18 **(NCP, 40 CFR Part 300)** for FTMM. Some of the
19 sites included with this Proposed Plan are classified
20 as **Petroleum, Oil and Lubricants (POL)** sites,
21 which are exempt from CERCLA, §101(14) and
22 104(a)(2). However, the Army's authority to
23 investigate and remediate environmental
24 contamination, as authorized by the Defense
25 Environmental Restoration Program (10 U.S.C.
26 §§2701 et. seq.) and as described in the **Defense**
27 **Environmental Restoration Program (DERP)**
28 Manual (DoDM 4715.20, 9 March 2012), requires
29 all such investigations and remedy selection
30 processes be consistent with CERCLA. For POL
31 sites, and other Resource Conservation and
32 Recovery Act (RCRA) corrective action responses,

33 the Department of Defense (DoD) interprets
34 consistent with to mean public participation prior
35 to remedy selection as described in the NCP.
36 Therefore, the Army has included the POL site to
37 include it in the public participation process. The
38 Army presents this Proposed Plan, consistent with
39 40 CFR 300.430(f)(2), to present to the public the
40 preferred remedy for these six sites.

Dates to Remember:

PUBLIC COMMENT PERIOD

October 27, 2022 – November 28, 2022

The Army will accept written comments on the Proposed Plan during the public comment period. Written comments may be postmarked or emailed by November 28, 2022 and sent to:

Christopher T. Gallo
Project Manager
Environmental, InterAgency &
International Services Branch
US Army Corps of Engineers New York District
C/O USEPA Region II
2890 Woodbridge Ave.
Edison, NJ 08818

Email: Christopher.t.gallo@usace.army.mil

PUBLIC MEETING:

If there is sufficient public interest, the Army will hold a public meeting to explain the Proposed Plan and proposed remedial alternative (no further action), and the public comment period will be extended to accommodate the public meeting.

The Proposed Plan can be found at:

<https://fortmonmouthrecords.com/site-records/>

*Words or phrases in **BOLD** are defined in the glossary at the end of this document.

1 The Army, in consultation with the NJDEP, shall
2 make the final selection of the response action for
3 sites: Parcel 71 PCB Area, FTMM-59 (Parcels 41
4 and 43), Parcel 70, Parcel 82, Parcel 97, and UST
5 490.

6 This Proposed Plan provides the rationale for the
7 NFA determinations and describes the public
8 involvement process for sites: Parcel 71 PCB Area,
9 FTMM-59 (Parcels 41 and 43), Parcel 70, Parcel 82,
10 Parcel 97, and UST 490.

11 PUBLIC INVOLVEMENT PROCESS

12 As the lead agency for implementing the
13 environmental response program at FTMM, the
14 Army has prepared this Proposed Plan in
15 accordance with CERCLA Section 117(s) and
16 Section 300.430(f)(2) of the NCP to continue its
17 community awareness efforts and to encourage
18 public participation. After the public has the
19 opportunity to review and comment on this
20 Proposed Plan, the Army will respond to the
21 comments received during the public comment
22 period. Information on the public comment period
23 is presented in the box on Page 1.

24 Local community members and other interested
25 parties are encouraged to review this Proposed
26 Plan and submit comments. The Army will carefully
27 consider all comments received from the public
28 and provide responses that will be compiled into a
29 **Responsiveness Summary**. The decision on the
30 appropriate action for Parcel 71 PCB Area, FTMM-
31 59 (Parcels 41 and 43), Parcel 70, Parcel 82, Parcel
32 97, and UST 490 will be detailed in a **Record of**
33 **Decision (ROD)**, which will include the
34 Responsiveness Summary.

35 This Proposed Plan summarizes information that
36 can be found in greater detail in the **Site**
37 **Investigations (SIs), Remedial Investigations (RIs),**
38 and other documents contained in the
39 **Administrative Record (40 CFR 300.800)** file on the
40 website listed in the box on Page 1. The Army
41 encourages the public to review these documents
42 to gain a more comprehensive understanding of
43 the sites and all associated activities.

44 SITE BACKGROUND

45 FTMM is located in the central-eastern portion of
46 New Jersey in Monmouth County, approximately
47 45 miles south of New York City, New York; 70
48 miles northeast of Philadelphia, Pennsylvania; and
49 40 miles east of Trenton, New Jersey. The Atlantic
50 Ocean is approximately 3 miles to the east. FTMM
51 was comprised of three areas: the Main Post (MP),
52 the Charles Wood Area (CWA), (Figure 1, below)
53 and the Evans Area (not shown). FTMM's MP and
54 CWA were selected for closure by the Base
55 Realignment and Closure (BRAC) Commission in
56 2005 and officially closed on September 15, 2011.
57 The EA was closed under BRAC in 1998 and has
58 since been transferred from FTMM.



59
60 **Figure 1 – Fort Monmouth Location**

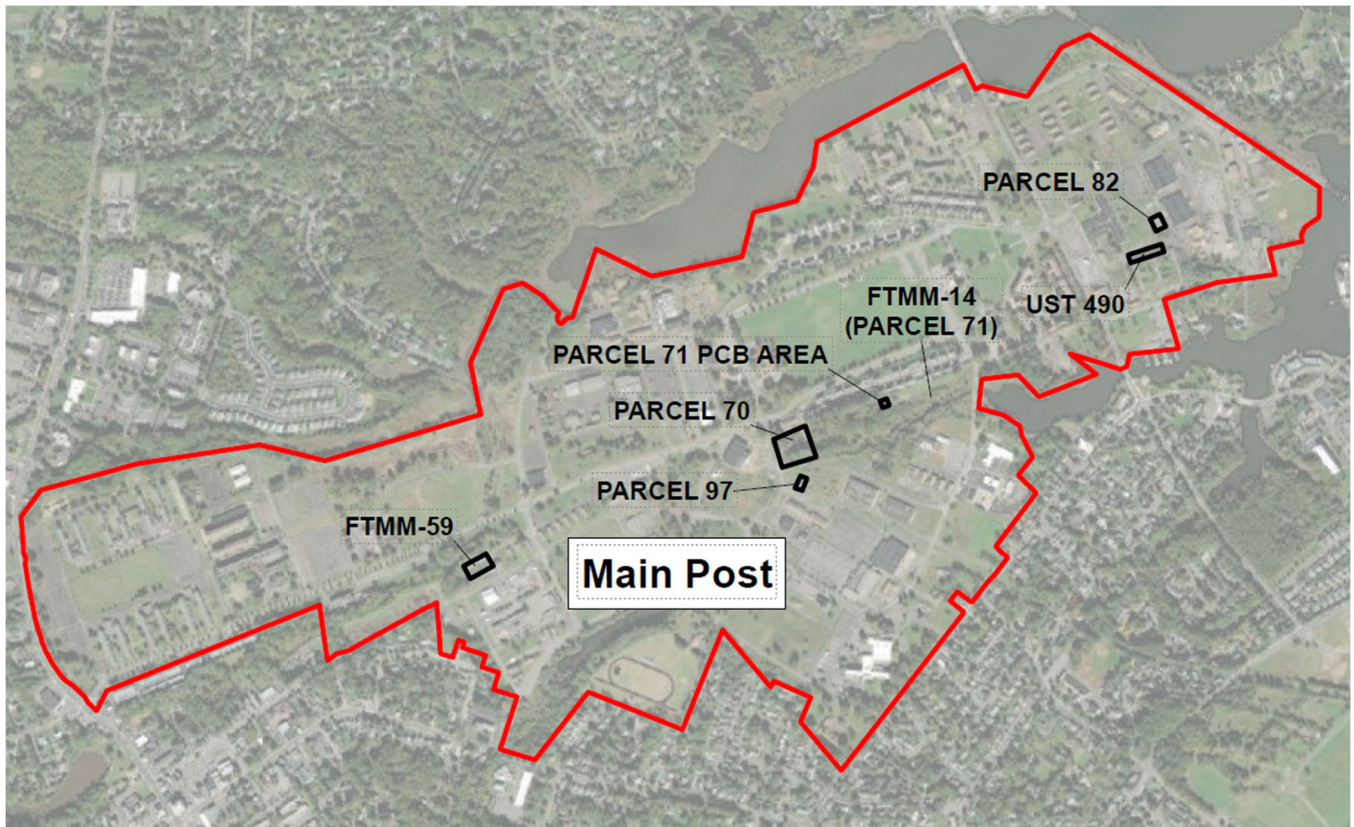
61 Several investigations were conducted at sites
62 Parcel 71 PCB Area, FTMM-59 (Parcels 41 and 43),
63 Parcel 70, Parcel 82, Parcel 97, and UST 490 over
64 the past 20 years. All six sites are located on the
65 MP, as shown on Figure 2. Generally, these
66 investigations are summarized in the most recent
67 investigation report or other summary report for
68 each site.

69 Major vegetation zones at FTMM consist of
70 landscaped areas, wetlands, **riparian** areas, upland
71 forests, and **old field habitats**. Much of the upland
72 areas of the MP consist of extensive areas of
73 former Army facilities with regularly mowed lawns
74 and landscaped areas. Detailed vegetation
75 information can be found in the Baseline Ecological
76 Evaluation Report (Shaw, 2012).

77

1

2 **SITE CHARACTERIZATION**



3

4

Figure 2 – Main Post Site Locations

5

I

1 FTMM is situated on Coastal Plain deposits which
2 are unconsolidated material that has not been
3 cemented or compacted. Soil encountered at
4 FTMM is typically comprised of fine to coarse sand
5 with fine gravel, and green/gray/black sandy silt
6 and clay with varying amounts of sand and gravel.

7 **Groundwater** is typically encountered at the MP
8 and in the surrounding areas at depths of 2 to 9
9 feet below ground surface (bgs). Groundwater
10 elevations fluctuate in response to precipitation
11 events, with some tidal influence in areas near
12 creeks. New Jersey Groundwater Quality Standards
13 (GWQS) classify groundwater at FTMM as Class II-
14 A: **potable water** with secondary uses including
15 agricultural and industrial (NJDEP, 2010).

16 To determine the nature and extent of
17 contamination at each site, detected
18 concentrations of potential contaminants were
19 compared to NJDEP residential, non-residential,
20 and **Impact to Groundwater (IGW)** screening
21 criteria, as appropriate. NJDEP comparison criteria
22 included:

- 23 • Residential Direct Contact Soil
24 Remediation Standards (RDCSRS), Non-
25 Residential Direct Contact Remediation
26 Standards (NRDCSRS), and IGW screening
27 levels (SLs) for soils; and
- 28 • GWQS for groundwater.

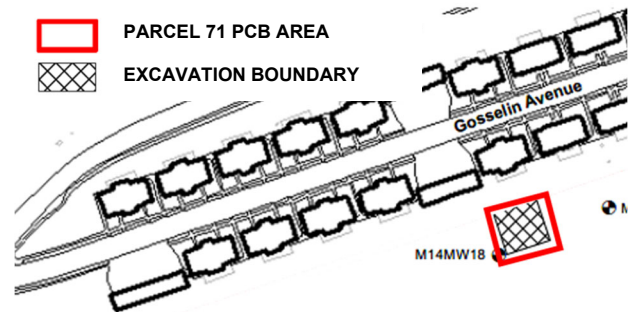
29 These criteria were used to identify those
30 chemicals that are constituents of concern (COCs).
31 As described below, any contaminants that were
32 once identified as COCs for sites Parcel 71 PCB
33 Area, FTMM-59 (Parcels 41 and 43), Parcel 70,
34 Parcel 82, Parcel 97, and UST 490 have been
35 further evaluated and/or remediated and
36 determined to no longer be COCs. The NJDEP has
37 concurred that they are no longer COCs.

38 The following subsections describe site
39 characterization activities and interim actions for
40 soil and groundwater for each of the six sites
41 covered in this Proposed Plan.

42 **Parcel 71 PCB Area**

43 The Parcel 71 PCB Area is located south of the
44 residential area along Gosselin Avenue, and north-
45 northwest of the FTMM-14 landfill (Figures 2 and

46 3). An approximately 60-ft by 60-ft area was
47 evaluated in 2009 for possible use as a playground,
48 but the area was not used as a playground.



49
50 **Figure 3 – PARCEL 71 PCB Area Site Layout**

51 Nine soil borings were drilled and sampled in May
52 2009 and analyzed for pesticides and
53 **polychlorinated biphenyls (PCBs)**. Soil samples
54 were collected from three depth intervals at each
55 boring location: 0 to 0.5 feet bgs, 0.5 to 1 foot bgs,
56 and either 1 to 1.5 feet bgs or 1.5 to 2 feet bgs.
57 Total PCBs were detected in concentrations that
58 exceeded RDCSRS in all nine locations in the near
59 surface intervals.

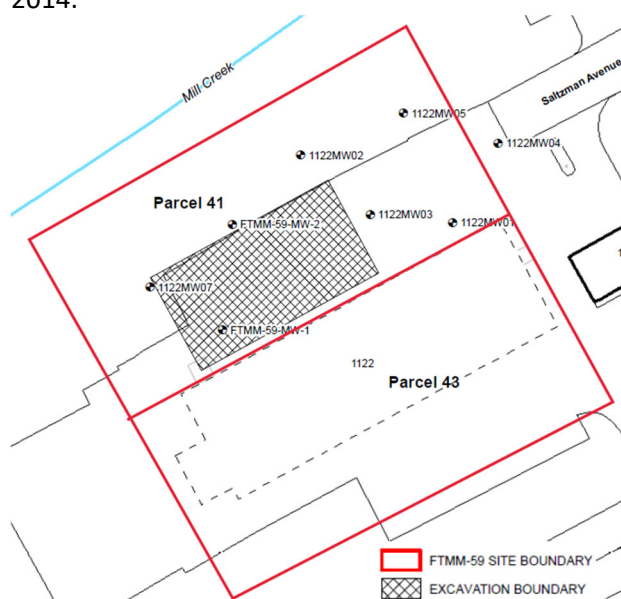
60 In 2019, PCB samples were collected and analyzed
61 from nine primary borings. The samples were
62 collected from the 0 to 0.5 ft bgs interval, with a
63 contingency sample collected in the 1.0 to 1.5 foot
64 bgs interval, which would be analyzed only if the
65 initial interval PCB analysis exceeded the RDCSRS.
66 An additional eight secondary borings were
67 advanced, and additional contingency samples
68 were collected from the same two intervals. These
69 samples would be analyzed if the primary boring
70 samples exceeded RDCSRS for PCBs and the
71 extents of PCB contaminated soil extended beyond
72 initial boundaries. Two of the additional boring
73 location PCB samples needed to be run. In general,
74 the 2019 PCB samples did not corroborate the
75 more widespread soil PCB exceedances indicated
76 by the May 2009 results. Only one boring
77 exceeded the RDCSRS and required removal. The
78 other PCB detections were less than the RDCSRS.

79 In March of 2020, a Time Critical Removal Action
80 (TCRA, 40 CFR 300.415(b)) was performed in
81 accordance with the Action Memorandum
82 (November 2019) to remove a small amount of
83 impacted soil in the area near Parcel 71 PCB Area.

1 This work was completed in accordance with the
2 Soil Remedial Action Work Plan (RAWP) to address
3 PCB concentrations that exceeded NJDEP RDCSRS
4 at one soil boring location (GOSS-SB-08). The
5 excavation covered approximately 100 square feet
6 and went to a depth of 1-foot bgs. All post
7 excavation PCB samples were in compliance with
8 the RDCSRS and NJDEP IGW Soil SL. Therefore, the
9 Army proposed NFA for this site. The NJDEP
10 concurred with NFA for PCBs at Parcel 71 PCB Area
11 (NJDEP, 2021b).

12 **FTMM-59 (Parcels 41 and 43)**

13 FTMM-59 is located in the southwestern portion of
14 the MP (Figures 2 and 4) and encompasses former
15 Building 1122, the surrounding parking lot and two
16 former storage sheds. Building 1122 housed a
17 modern 'do-it-yourself' auto repair shop for FTMM
18 personnel. The construction date of the building is
19 unknown, but Building 1122, the chemical storage
20 shed, and the paint booth/shed were demolished
21 in June 2014. The building's foundation slab, two
22 underground hydraulic lifts, located within the
23 footprint of the former building, and associated
24 hydraulic lift fluid storage tanks were removed in
25 2014.



26
27 **Figure 4 – FTMM 59 (Parcels 41 and 43) Site**
28 **Layout**

29 Several historical actions have occurred at FTMM-
30 59 that do not require further remediation. For
31 details on these historical actions, please review

32 the FTMM-59 RI Report (Parsons, 2020). Some of
33 these historical actions are listed below:

- 34 • 1994 removal of 1,500-gallon fuel oil UST
- 35 • 1992 removal of 550-gallon waste oil UST
- 36 • 1995 Remediation of a non-PCB-containing
37 oil spill from two pole-mounted
38 transformers
- 39 • 1995 Removal of a hydraulic lift at Bay #12
40 due to release
- 41 • 2000 Investigation of the northeast corner
42 of the parking lot included 14 soil borings
43 near the former 1122B waste oil UST
- 44 • 2004 remedial investigation was
45 conducted at a fuel-contaminated area
46 north of Building 1122 and south of Mill
47 Creek. Approximately 3,000 cubic yards
48 (CY) of soil were excavated and disposed
49 offsite.
- 50 • 2009 and 2010 failed hydraulic lifts at Bays
51 #9 and #10 were investigated
- 52 • 2010 investigation of the chemical storage
53 and paint booth sheds

54 In 2015, the Army conducted additional
55 investigation at FTMM-59 to close data gaps from
56 the aforementioned historical investigations with
57 the objectives to: 1) define the vertical and lateral
58 extent of **semi-volatile organic compounds**
59 **(SVOCs)/ polycyclic aromatic hydrocarbons (PAHs)**
60 and lead detected in surface soil adjacent to the
61 former chemical storage and paint booth sheds; 2)
62 characterize fuel hydrocarbons in soil from the
63 fuel-contaminated area north of former Building
64 1122; and 3) further characterize the magnitude
65 and extent of hydraulic oil contamination at the
66 former service bays located at the eastern end of
67 former Building 1122.

68 Concentrations of naphthalene, benzo(a)pyrene,
69 lead, and vanadium exceeded RDCSRS in at least
70 one of the 98 soil samples collected from 1992 to
71 2015. In addition, concentrations of methylene
72 chloride (a common laboratory contaminant),
73 benzo(a)pyrene, benzo(b)fluoranthene, dieldrin,
74 aluminum, beryllium, lead, manganese, mercury,
75 silver, and zinc exceeded the IGW Soil SL in at least
76 one of the 98 soil samples collected from 1992 to
77 2015.

1 As a result of the RI, the Army conducted soil
2 removal and off-site disposal from May through
3 August 2019 to address exceedances of the
4 RDCSRs in soil. Following excavation, confirmation
5 samples were collected from each excavation area.
6 The results of the removal actions are documented
7 in the Remedial Action Completion Report FTMM-
8 59 (Parsons March 2020), which is included as an
9 appendix to the RI Report. All sample results were
10 less than the RDCSRs. Therefore, NFA was
11 proposed for soil at FTMM-59 and the NJDEP
12 concurred with this assessment (NJDEP, 2020).

13 Concentrations of the following constituents
14 exceeded the NJDEP GWQS in at least one
15 groundwater sample collected from permanent
16 monitoring wells from November 2009 through
17 December 2015: benzene, cadmium, and
18 manganese. Site monitoring wells were re-
19 developed and re-sampled for cadmium and
20 manganese in 2018 and 2019, and one monitoring
21 well was re-sampled for benzene in 2019.
22 Exceedances of the respective GWQS for cadmium
23 and manganese were confirmed; however, the
24 concentration of these metals in upgradient and
25 side-gradient wells indicates that the source is not
26 attributable to FTMM-59. These metals may be
27 naturally occurring as no on-site sources have been
28 identified. The two most recent groundwater
29 sampling rounds conducted in 2019 indicate
30 concentrations of benzene in groundwater have
31 attenuated to less than the GWQS. Therefore, no
32 additional measures are required for groundwater
33 at FTMM-59.

34 Surface water samples were collected in Mill Creek
35 at locations upstream and downstream of FTMM-
36 59 site from the 1st Quarter 2007 through the 3rd
37 Quarter 2010. Tetrachloroethene (PCE)
38 concentrations exceeded the freshwater Surface
39 Water Quality Standard (SWQS) during almost
40 every sampling event. PCE concentrations in Mill
41 Creek near FTMM-59 originate from an upstream,
42 off-site source and are not attributed to FTMM-59.

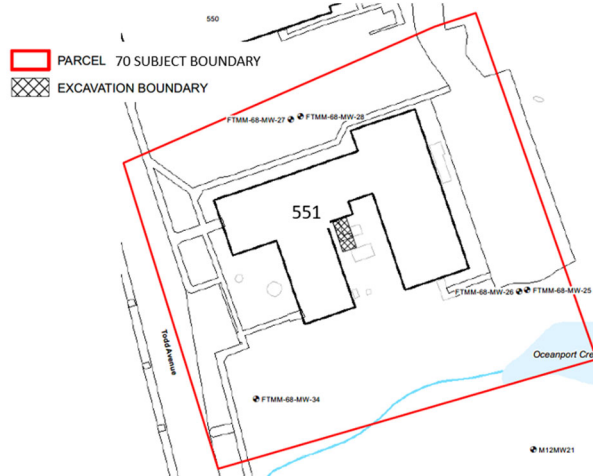
43 Sediment samples in Mill Creek were collected in
44 2007 from three locations upstream and
45 downstream of FTMM-59. There were no
46 exceedances of the NJDEP RDCSRs for **volatile**
47 **organic compounds (VOCs)**, and PCBs were not
48 detected. One SVOC (benzo[a]pyrene) and one

49 metal (vanadium) were detected in four of the
50 samples at concentrations exceeding the NJDEP
51 RDCSRs. However, PAHs and metals in sediment
52 adjacent to FTMM-59 originate from an upstream,
53 off-site source and are not attributed to FTMM-59.

54 Based on the results of the Remedial Investigation
55 Report for Site FTMM-59(Parsons March 2020),
56 the Army concludes that NFA is required for any
57 media at the FTMM-59 site. The NJDEP concurred
58 that NFA is required at FTMM-59 (NJDEP, 2020).

59 Parcel 70

60 As summarized in the Action Memorandum
61 (Parsons, 2018), Parcel 70 is located in the central
62 portion of the FTMM MP. (Figures 2 and 5).
63 Building 551 is located in Parcel 70 and housed a
64 classroom and photo processing operation. A
65 Quonset hut was adjacent to Building 551 which
66 was used for analytical work on photographic
67 chemicals. The Quonset hut has been demolished.



68
69 **Figure 5 – Parcel 70 Site Layout**

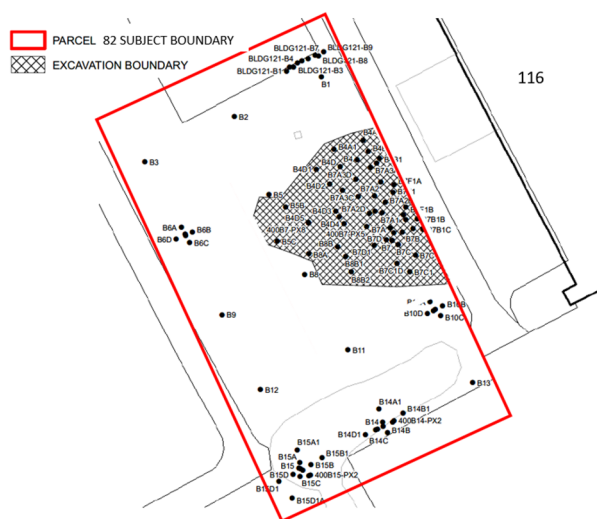
70 The potential for discharges related to previous
71 operations at Parcel 70 was initially assessed in the
72 BRAC Report (U.S. Army, 2007), and further
73 evaluated in the SI Report (U.S. Army, 2008). The SI
74 included the collection of one surface soil sample
75 that was analyzed for target compound list (TCL)
76 analytes (including VOCs, SVOCs, and PCBs without
77 pesticides) plus tentatively identified compounds
78 (TICs), and target analyte list (TAL) metals.

79 Additional investigation occurred in April 2016 to
80 characterize PCBs in soil. Six borings were drilled
81 and sampled within the courtyard of Building 551.

1 Only one shallow sample (0 to 0.5 feet bgs) of the
2 eight samples collected and analyzed exceeded the
3 RDCSRS for PCBs. The Army prepared an Action
4 Memorandum (Parsons January 2018) to support
5 the TCRA of the PCB contaminated soil. The Army
6 removed the PCB-contaminated soil and
7 confirmation samples collected after excavation
8 and off-site disposal were all less than the RDCSRS
9 for PCBs. This action was documented in a letter
10 report to the NJDEP dated June 16, 2017 in which
11 the Army concluded that NFA is required at Parcel
12 70. The NJDEP concurred that NFA is required
13 (NJDEP, 2017a).

14 **Parcel 82**

15 Parcel 82 is part of the 400 Area, which
16 encompasses approximately 30 acres of open
17 fields and paved areas extending east of Oceanport
18 Avenue, south-southeast of Parker's Creek, west of
19 Burns Avenue and north of Tilly Avenue (Figures 2
20 and 6).



21
22 **Figure 6 – Parcel 82 Site Layout**

23 Soil sampling was initially conducted in 2004 and
24 2005 in the 400 area, including Parcel 82, which
25 involved extensive borings, full-suite analyses, and
26 contaminated soil removal. Soil samples collected
27 in the 2004/5 investigation identified PCBs and
28 PAHs in shallow soils in concentrations greater
29 than the NRDCSRS. Multiple borings and samples
30 were advanced to delineate the horizontal and
31 vertical extents of the NRDCSRS exceedances.
32 Approximately 120 cubic yards (CY) of PCB-
33 contaminated soil from one area and

34 approximately 35 CY of PAH-contaminated soil
35 from multiple locations were excavated and
36 disposed offsite. This action was documented in
37 the Final Remedial Action Report for the 800, 700
38 and 400 Areas (Tetra Tech October 2005).

39 In 2018, additional soil borings were advanced, and
40 samples collected to further delineate PCBs and
41 PAHs at Parcel 82, with results compared to
42 RDCSRS. Based on the investigation results, PAH
43 concentrations were evaluated using NJDEP
44 compliance averaging methods, which indicated
45 the compliance averages were less than the
46 RDCSRS. Therefore, NFA is required to address
47 PAHs at Parcel 82. The NJDEP concurred with the
48 Army regarding PAHs on July 8, 2019. The PCB
49 concentrations remaining onsite, however, exceed
50 RDCSRS. Therefore, in accordance with the Action
51 Memorandum (Parsons 2019a) a TCRA was
52 proposed, approved, and implemented to address
53 PCB-contaminated soil at Parcel 82.

54 Between June 18 and 24, 2020, an approximately
55 9,000 square foot soil excavation area was
56 remediated at Parcel 82. The remedial area was
57 excavated to a depth of 1.5 to 2.0 feet bgs.
58 Approximately 669 tons of soil were removed and
59 disposed offsite. Post-excavation soil samples were
60 collected from the bottom and sidewalls at depths
61 corresponding to previous exceedances. Post
62 excavation analytical results demonstrated
63 compliance with the NJDEP IGW Soil SL and/or
64 RDCSRS at all pre- and post- excavation compliance
65 sample locations. This activity was documented in
66 the Soil Remedial Action Completion Report Parcel
67 82 (AECOM December 2020) in which the Army
68 concluded that NFA is required for soil at Parcel 82.

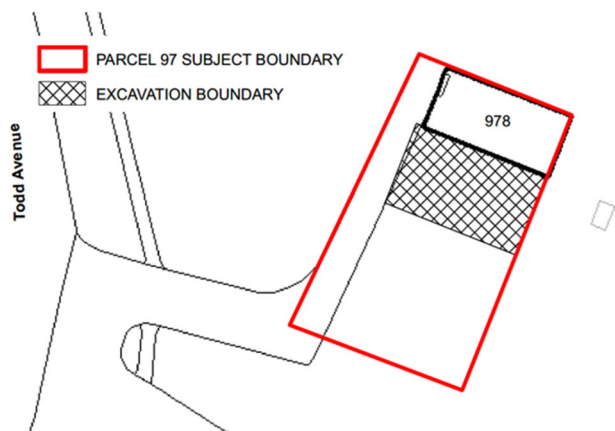
69 Groundwater was not investigated onsite during
70 the 2018 soil investigation. However, in response
71 to an NJDEP request (NJDEP, 2019a), and as
72 described in the Army's letter to the NJDEP (Army,
73 2020), the Army installed one permanent
74 monitoring well at Parcel 82. The Army collected
75 two rounds of groundwater samples that were
76 analyzed for PCBs: one in November 2019 and the
77 second in March 2020. There were no detections
78 of PCBs in groundwater at Parcel 82. The Army
79 presented the results of this sampling in a letter
80 dated June 25, 2020 in which the Army concluded
81 that NFA is required.

1 The NJDEP concurred with the Army that NFA is
2 required for soil or groundwater at Parcel 82 in a
3 letter dated January 29, 2021 (NJDEP, 2021a).

4 **Parcel 97**

5 Parcel 97 is an electrical substation located
6 adjacent to Building 978 in the central portion of
7 the MP (Figure 2 and Figure 7). Real property
8 records indicate that Building 978 was constructed
9 by 1954 as an electrical switching station. Building
10 978 presently houses electrical components and is
11 adjacent to an active electrical substation. Based
12 on the period of operation of the substation, it is
13 likely that PCB-containing electrical equipment
14 were used at Parcel 97.

15 The Army collected surface soil samples at Parcel
16 97 in December 2007 to determine if historical use
17 of potential PCB-containing equipment resulted in
18 the release of PCBs from the electrical substation
19 adjacent to Building 978. A total of ten (including
20 duplicate sample) surface soil samples (0 to 6
21 inches bgs) were collected from nine distinct hand
22 auger locations.



23
24 **Figure 7 – Parcel 97 Site Layout**

25 In November 2015, the Army conducted additional
26 soil sampling and identified areas impacted with
27 PCBs near a concrete pad adjacent to Building 978.
28 A total of 22 soil samples from 17 boring locations
29 were collected to confirm and further delineate
30 the extent of PCBs in soil.

31 From January 2016 through August 2016, the Army
32 removed PCB-impacted soil and concrete in
33 multiple phases (I, II, and III), and performed
34 additional delineation and confirmation soil

35 sampling for PCBs. A total of 105 soil samples were
36 collected and analyzed for PCBs.

37 In addition to PCBs, there were detections of PAHs
38 that exceeded RDCSRS cleanup standards.
39 However, the Army evaluated the risk of these PAH
40 exceedances using NJDEP's compliance averaging
41 method and concluded that PAHs did not pose an
42 unacceptable risk to human health or the
43 environment. The results of the TCRA were
44 documented in a letter report dated November 1,
45 2016 (Tetra Tech), in which the Army requested
46 NFA for soils. It is also noted that this work was
47 also documented in a post action, Action
48 Memorandum (Parsons April 2019). The NJDEP
49 concurred with the Army's proposal for NFA
50 regarding PAHs at Parcel 97 in a letter dated
51 January 19, 2018 (NJDEP, 2018).

52 PCBs were detected in seven groundwater samples
53 that were collected as grab samples from soil
54 boring locations during Phase II (June 2016).
55 However, these results were attributed to PCB-
56 containing soil in the turbid groundwater samples.
57 Two permanent wells were installed at the
58 locations of previous PCB detections in these
59 groundwater grab samples. These wells were
60 sampled in April 2017, and there were no
61 detections of PCBs, which confirmed that PCBs
62 have not impacted groundwater at Parcel 97 as
63 documented in the letter report from the Army
64 dated May 17, 2017.

65 After the TCRA, there are no hazardous substances
66 in soil or groundwater remaining at Parcel 97 in
67 concentrations that are unacceptable for
68 unrestricted use/unlimited exposure scenarios.
69 Therefore, the Army proposes NFA for Parcel 97.
70 The NJDEP concurs with NFA for Parcel 97 in letters
71 dated May 26, 2017, and January 19, 2018.

72 **UST 490**

73 The SI Report (U.S. Army, 2019) indicated that the
74 former UST 490 was located adjacent to Building
75 490 within Parcel 79 in the eastern portion of the
76 FTMM MP (Figures 2 and 8). The UST 490 site is
77 surrounded by Building 490 to the south, a
78 paved parking area to the west, and open grassy
79 areas in other directions.

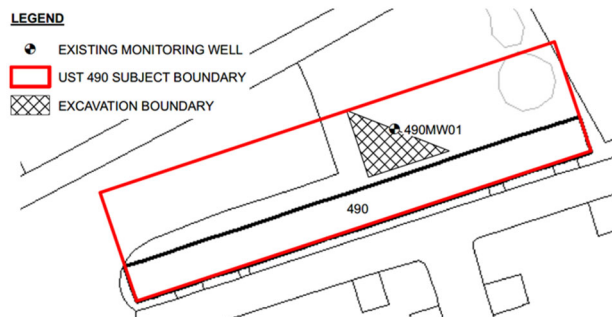


Figure 8 – UST 490 Site Layout

UST 490 was a 1,000-gallon steel No. 2 fuel oil UST (Registration ID No. 90010-58) that was removed by the Army in May 1990. No closure samples were collected in 1990 because no soil contamination was observed. In 2005, a subsurface investigation was conducted to assess the site for petroleum contamination. Three soil samples and one duplicate sample were collected from three locations along the former tank centerline. The soil samples were analyzed for **total petroleum hydrocarbons (TPH)**. One groundwater sample was also collected as a grab sample from one of the soil borings and analyzed for VOCs and SVOCs.

Additional groundwater sampling was conducted from temporary wells in 2010, 2016, and 2017. Three permanent wells were sampled in 2018. Select VOCs and SVOCs were detected at concentrations above their GWQS within five temporary wells (PAR-79-490-TMW-01, PAR-79-490-TMW-02, PAR-79-490-TMW-03, PAR-79-490-TMW-05 and PAR-79-490-TMW-08) in August 2016 and November 2017. However, there were no exceedances of the GWQS in the permanent wells sampled. The results from the permanent wells are more representative of groundwater conditions because the permanent wells are developed and purged prior to the implementation of low flow groundwater sampling. Therefore, the Army concluded that there are no constituents of potential concern (COPCs) in groundwater at UST 490 and requested NJDEP concurrence that NFA is required for groundwater at this site in the SI Report.

As summarized in the SI Report (U.S. Army, 2019) and the Site Remedial Action Completion Report (RACR) (AECOM, 2021), multiple rounds of soil

sampling performed from 2005 through 2016 verified the presence of petroleum contaminated soils near the former UST location. EPH had been detected in soil at concentrations exceeding the current (June 2019) NJDEP **extractable petroleum hydrocarbon (EPH)** residual product limit of 8,000 mg/kg. Excavation and off-site disposal were selected as the remedy for a triangular “hot-spot” excavation area approximately 18-foot wide by 30-foot in length and 7-feet in depth.

On March 18, 2020, the soil excavation was remediated. The remedial area was excavated to a depth of approximately 7 feet bgs. Following excavation of the EPH impacted soils, the results of confirmation soil sampling and analysis indicated compliance with NJDEP EPH Residential Soil Remediation Criterion (6 mg/kg) and RDCSRS and demonstrated the effectiveness of the remedial action in protecting public health, safety, and the environment.

The Army proposed NFA for soil and groundwater at UST 490. The NJDEP concurred in a letter dated October 14, 2022, that soil and groundwater are approved for unrestricted use and require no further action.

SCOPE AND ROLE OF RESPONSE ACTION

No further action is appropriate for sites Parcel 71 PCB Area, FTMM-59 (Parcels 41 and 43), Parcel 70, Parcel 82, Parcel 97, and UST 490. Unrestricted use (as represented by NJDEP residential criteria) allows for full use of these sites without restrictions.

SUMMARY OF SITE RISKS

Any contaminants that were once identified as COCs for sites (Parcel 71 PCB Area, FTMM-59 (Parcels 41 and 43), Parcel 70, Parcel 82, Parcel 97, and UST 490 have been evaluated and/or remediated and determined to no longer be COCs. Therefore, soil and groundwater (there is no potentially impacted surface water or sediment attributed to any of these sites) do not pose an unacceptable risk to human health and the

1 environment for current and future intended land
2 use.

3 **SUMMARY OF PREFERRED** 4 **ALTERNATIVE**

5 Based on the results of multiple environmental
6 investigations and reports, no remedial actions are
7 required for sites Parcel 71 PCB Area, FTMM-59
8 (Parcels 41 and 43), Parcel 70, Parcel 82, Parcel 97,
9 and UST 490. Further investigation is not
10 warranted for the following reasons: (1) the nature
11 and extend of contaminants detected in soil and
12 groundwater at these sites has been characterized;
13 (2) no COCs posing unacceptable risks to human
14 health, or the environment were identified or, if
15 identified, are no longer COCs due to prior
16 remediation; and (3) no further investigation or
17 action is recommended by the Army. NJDEP
18 concurs with the preferred alternative, NFA.
19 Therefore, NFA is the preferred alternative at sites
20 Parcel 71 PCB Area, FTMM-59 (Parcels 41 and 43),
21 Parcel 70, Parcel 82, Parcel 97, and UST 490.

22 **COMMUNITY PARTICIPATION**

23 Public participation is an important component of
24 remedy selection. The Army is soliciting input from
25 the community on the preferred “no further
26 action” alternative identified for these sites. The
27 comment period includes the advertisement of this
28 Proposed Plan and a public comment period.
29 Written comments will be accepted during this
30 public comment period. The Army and the NJDEP
31 encourage the public to gain a more
32 comprehensive understanding of the sites and the
33 remedial activities that have been conducted at
34 the sites. The dates for the public comment period
35 and the location of the Administrative Record files
36 are provided on the front page of this Proposed
37 Plan.

38 Comments made by the public will be addressed in
39 a Responsiveness Summary. The Responsiveness
40 Summary will be included in the Record of Decision
41 and will be added to the FTMM Administrative
42 Record file and information repositories.

1 REFERENCES

- 2 AECOM, 2021. Soil Remedial Action Completion Report, UST 490, Fort Monmouth, New Jersey. NJDEP PI
3 G000000032. February.
- 4 AECOM, 2021a. Soil Remedial Action Completion Report, FTMM-14 Carveout (Gosselin Area of Parcel 71), Fort
5 Monmouth, New Jersey. PI G000000032. January.
- 6 AECOM, 2020. Soil Remedial Action Completion Report, Parcel 82, Fort Monmouth, New Jersey. NJDEP PI
7 G000000032. December.
- 8 DOD, 2018. Department of Defense Manual 4715.20 Defense Environmental Restoration Program (DERP)
9 Management March 9, 2012; Incorporating Change 1, August 31, 2018.
- 10 NJDEP, 2016. No Further Action Request- Area Adjacent to Building 978 (Parcel 97), Monmouth County, PI#
11 G000000032. 16 December.
- 12 NJDEP, 2017. Unrestricted Use Areas of Concern: Parcel 97 PCBs, Monmouth County, PI# G000000032. 26 May.
- 13 NJDEP, 2017a. Unrestricted Use Areas of Concern: Parcel 70 – Building 551 Former Photoprocessing, Monmouth
14 County, PI# G000000032. 12 December.
- 15 NJDEP, 2018. Unrestricted Use Areas of Concern: Parcel 97, Monmouth County, PI# G000000032. 19 January.
- 16 NJDEP, 2019. Site Investigation Report (SIR) UST 490. Fort Monmouth, Oceanport, Monmouth County, New
17 Jersey. PI G000000032. 7 August.
- 18 NJDEP, 2019a. Site Investigation Report (SIR) Parcel 82, Fort Monmouth, Oceanport, Monmouth County, New
19 Jersey. PI G000000032. 8 July.
- 20 NJDEP, 2020. Unrestricted Use, Scope of Remediation: Areas of Concern: Remedial Investigation Report (RIR)
21 FTMM-59, Monmouth County, New Jersey. PI G000000032. 12 June.
- 22 NJDEP, 2021. Unrestricted Use. Areas of Concern: Soil Remedial Action Completion Report UST 490. Monmouth
23 County. PI G000000032. 12 March.
- 24 NJDEP, 2021a. Unrestricted Use. Scope of Remediation: Parcel 82. Fort Monmouth, Oceanport, Monmouth
25 County, New Jersey. PI G000000032. 29 January.
- 26 NJDEP, 2021b. Unrestricted Use. Scope of Remediation: Gosselin Area of Parcel 71, Fort Monmouth, Oceanport,
27 Monmouth County, New Jersey. PI G000000032. 29 January.
- 28 Parsons, 2018. Action Memorandum for Parcel 70 – Building 551, Fort Monmouth, Oceanport, Monmouth
29 County, New Jersey. January.
- 30 Parsons, 2019. Action Memorandum for Parcel 97, Fort Monmouth, Oceanport, Monmouth County, New Jersey.
31 April.
- 32 Parsons, 2019a. Action Memorandum for Parcel 82, Fort Monmouth, Oceanport, Monmouth County, New
33 Jersey. October.
- 34 Parsons, 2019b. Action Memorandum for FTMM-14 Carveout (Gosselin Area of Parcel 71), Fort Monmouth,
35 Oceanport, Monmouth County, New Jersey. November.

- 1 Parsons, 2020. Remedial Investigation Report for Site FTMM-59, Fort Monmouth, Oceanport, Monmouth
2 County, New Jersey. March.
- 3 Shaw. 2012. Final Baseline Ecological Evaluation, Fort Monmouth Main Post & Charles Wood Area.
4 Monmouth County, New Jersey. May.
- 5 U.S. Army, 2019. UST 490 Site Investigation Report. Fort Monmouth, Monmouth County, Oceanport, New
6 Jersey. PI G000000032. 22 July.
- 7 U.S. Army, 2020. Response to NJDEP Comments on Parcel 82 Site Investigation Report, Fort Monmouth, New
8 Jersey. PI G000000032. 25 June.
- 9 U.S. Army, 2020a. Amended Site Investigation Report, Gosselin Area of Parcel 71, Fort Monmouth, New Jersey.
10 PI G000000032. 6 April.
- 11

1 ACRONYMS AND ABBREVIATIONS

Army	U.S. Army
bgs	Below Ground Surface
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
COC	Constituent of Concern
CWA	Charles Wood Area
CY	Cubic Yard
DERP	Defense Environmental Restoration Program
DoD	Department of Defense
FTMM	Fort Monmouth
GWQS	Groundwater Quality Standard
IGW	Impact to Groundwater
kg	Kilogram
mg	Milligram
MP	Main Post
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NFA	No Further Action
NJAC	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
NRDCSRS	Non-Residential Direct Contact Remediation Standards
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethene
POL	Petroleum, Oil and Lubricants
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RDCSRS	Residential Direct Contact Soil Remediation Standards
RI	Remedial Investigation
ROD	Record of Decision
SI	Site Investigation
SL	Screening Level
SVOC	Semi-volatile Organic Compound
SWQS	Surface Water Quality Standard
TAL	Target Analyte List
TCL	Target Compound List
TCRA	Time Critical Removal Action
TIC	Tentatively Identified Compound
UST	Underground Storage Tank
VOC	Volatile Organic Compound

2

GLOSSARY OF TERMS

Administrative Record – A file that contains all information used by the lead agency to make its decision on the selection of a response action under CERCLA. A copy of this file is to be available for public review at or near the site, usually at the information repository.

Compliance averaging – The average contaminant concentration in an area of concern may be used to determine compliance with remediation standards or soil cleanup criteria rather than the contaminant concentration of individual samples.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, otherwise known as Superfund) – A federal law that addresses the funding for and remediation of abandoned or uncontrolled hazardous waste sites. This law also establishes criteria for the creation of key documents such as the Remedial Investigation, Proposed Plan, and Record of Decision.

Contaminant of concern (COC) – A chemical that is present at sufficient concentrations to exceed NJDEP cleanup standards and so may pose a risk to human health or the environment.

Defense Environmental Restoration Program (DERP) - Under DERP, DoD conducts cleanup at active installations, Formerly Used Defense Sites, and BRAC locations. The Army manages the cleanup programs at their active installations and BRAC locations. **Groundwater** – Water found beneath the earth’s surface that fills pores between materials such as sand, soil, or gravel. In aquifers, groundwater occurs in sufficient quantities that it may be used for drinking water, irrigation, and other purposes.

Ground Water Quality Standards (GWQS) – NJDEP GWQS, N.J.A.C 7:9C, establish the designated uses of the State's groundwater and specify the water quality (criteria) necessary to attain those designated uses. The ground water quality criteria are numerical values assigned to each constituent (pollutant) discharged to groundwater of the State. The GWQS also contain technical and general policies to ensure that the designated uses can be adequately protected. Groundwater is classified according to its hydrogeologic characteristics and designated uses.

Impact to groundwater (IGW) – A NJDEP soil cleanup standard that is applied in soil above the groundwater table that is designed to be protective of groundwater quality.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP) – National Oil and Hazardous Substances Pollution Contingency Plan, “National Contingency Plan” (40 CFR 300). Provides the organizational structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances, pollutants, and contaminants.

New Jersey Administrative Code (N.J.A.C.) – The collection of all rules and regulations made by the executive branch agencies of the State of New Jersey.

No further action (NFA) – the culmination of a property’s environmental remediation, or determination of no need for environmental remediation.

Old field habitats – Old field habitats include formerly mowed areas where the vegetation includes grasses, forbes and often immature trees. Old field habitats at the MP include grasses, many forbes including Queen Ann’s lace (*Daucus carota*), pokeweed (*Phytolacca americana*), goldenrod (*Solidago* sp.) milkweed (*Asclepias syriaca*), and sparse saplings of tree species including eastern red cedar (*Juniperus virginiana*) and winged sumac (*Rhus copallinum*).

Petroleum, Oil, and Lubricant (POL) – A broad term that includes all petroleum and associated products used by the Armed Forces.

- 1 **Polychlorinated biphenyls (PCB)** – A group of persistent chemicals used in transformers and capacitors for
2 insulating purposes and in gas pipeline systems as a lubricant.
- 3 **Potable water** – Water of a quality suitable for drinking.
- 4 **Proposed Plan** – A plan that identifies the preferred remedial alternative(s) for a site, and is made available to
5 the public for comment.
- 6 **Record of Decision (ROD)** - A public document that explains which cleanup alternative(s) will be used at a site.
- 7 **Remedial Action Workplan (RAWP)** – A work plan that includes a site summary, a summary of cleanup goals,
8 and information required for the implementation of remedial action.
- 9 **Remedial Investigation (RI)** – Exploratory inspection conducted at a site to define the nature and extent of
10 contamination present, and to assess potential related hazards and risks.
- 11 **Riparian** – Riparian areas are ecosystems adjacent to a river or waterway that, in an undisturbed state, provide
12 habitat for wildlife and help improve water quality. Riparian areas are usually transitional zones between
13 wetland and upland areas and are generally comprised of grasses, shrubs, trees, or a mix of vegetation types
14 that exist within a variety of landscapes (e.g., natural, agricultural, forested, suburban, and urban).
- 15 **Site Investigation (SI)** - Exploratory inspection conducted at a site to determine absence or presence of
16 contamination.
- 17
- 18

1 **USE THIS SPACE TO WRITE YOUR COMMENTS**

2 Your input on the Proposed Plan for sites Parcel 71 PCB Area, FTMM-59 (Parcels 41 and 43), Parcel 70, Parcel 82,
3 Parcel 97, and UST 490 is important to the Army. Comments provided by the public are valuable in helping the
4 Army select a remedy for these sites. You may use the space below to write your comments. Comments must be
5 postmarked by November 28, 2022. Mailed comments should be sent to Mr. Chris Gallo at the address listed on
6 Page 1. Comments may also be emailed to Mr. Gallo by November 28, 2022 via the following e-mail address:
7 Christopher.t.gallo@usace.army.mil

8 If you have any questions about the comment period, please contact Mr. Gallo at:
9 Christopher.t.gallo@usace.army.mil.

10 Name: _____

11 Address: _____

12 City: _____

13 State and Zip: _____

14

15 **Comments:**

16