MILITARY OCEAN TERMINAL CONCORD

Army Cleanup Program

Installation Action Plan

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ACRONYMS

Acronym	Definition	
AEDB-R	Army Environmental Database-Restoration	
AOC	Area of Concern	
CC	Compliance-related Cleanup	
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980	
COC	Contaminants of Concern	
DD	Decision Document	
DERP	Defense Environmental Restoration Program	
DET	Detachment	
ENV	Environmental	
EOD	Explosive Ordnance	
ERA	Ecological Risk Assessment	
ESD	Explanation of Significant Difference	
FFA	Federal Facility Agreement	
FS	Feasibility Study	
HRR	Historical Records Review	
HQAES	Headquarters Army Environmental System	
IC	Institutional Controls	
IR	Installation Restoration	
LTM	Long-Term Management	
LUC	Land Use Control	
MILCOM	Military Communication	
мотсо	Military Ocean Terminal Concord	
MR	Munitions Response	
MRSPP	Munitions Response Site Prioritization Protocol	
NAVWPNSTA	Naval Weapons Station	
ОС	Organochlorine	
РСВ	Polychlorinated Biphenyl	
PP	Proposed Plan	

Acronym	Definition	
RA	Remedial Action	
RA(C)	Remedial Action (Construction)	
RACR	Remedial Action Completion Report	
RAB	Restoration Advisory Board	
RASS	Remedial Action Sub-site	
RC	Response Complete	
RD	Remedial Design	
RDX	Cyclotrimethylenetrinitramine	
RI	Remedial Investigation	
ROD	Record of Decision	
RRSE	Relative Risk Site Evaluation	
STLC	Soluble Threshold Limit Concentration	
TCRA	Time Critical Removal Action	
USEPA	US Environmental Protection Agency	
UST	Underground Storage Tank	
WBS	Work Breakdown Structure	

PHASE TRANSLATION TABLE

HQAES Phase ID	CERCLA Phase	RCRA Phase	RCRA UST Phase
.01	Preliminary Assessment (PA)	RCRA Facility Assessment (RFA)	Initial Site Characterization (ISC)
.02	Site Inspection (SI)	Confirmation Sampling (CS)	Investigation (INV)
.03	Remedial Investigation/ Feasibility Study (RI/FS)	RCRA Facility Investigation/Corrective Measures Study (RFI/CMS)	Corrective Action Plan (CAP)
.04	Remedial Design (RD)	Design (DES)	Design (DES)
.05	Interim Remedial Action (IRA)	Interim Measure (IM)	Interim Remedial Action (IRA)
.06	Remedial Action Construction) (RA(C))	Corrective Measures Implementation (CMI(C))	Implementation (Construction) (IMP(C))
.07	Remedial Action (Operation) (RA(O))	Corrective Measures Implementation (Operation) (CMI(O))	Implementation (Operations) (IMP(O))
.08	Long-Term Management (LTM)	Long-Term Management (LTM)	Long-Term Management (LTM)

SITE ALIAS LIST

WBS Element	AEDB-R Reference	Site Alias
0696A.1001	MOTCO-007-R-01_EXPLOSIVE ORDNANCE DISPLO	UXO 00007
0696A.1002	MOTCO-008-R-01_PORT CHICAGO TIDAL AREA E	UXO 00008
0696A.1003	MOTCO-010-R-01_SUISUN BAY IMPACT AREA	UXO 00010
0696A.1004	MOTCO-005_ALLIED CHEMICAL SITE B	SITE 00005
0696A.1005	MOTCO-006_COKE PILE SITE	SITE 00006
0696A.1006	MOTCO-009_FROID AND TAYLOR ROADS	SITE 00009
0696A.1007	MOTCO-011_WOOD HOGGER SITE	SITE 00011
0696A.1008	MOTCO-025_K-2 AREA	SITE 00025
0696A.1009	MOTCO-026_G-1 AREA	SITE 00026
0696A.1010	MOTCO-028_LITIGATION AREA MONITORING	SITE 00028
0696A.1012	MOTCO-031_FORMER FERTILIZER PLANT	SITE 00031
0696A.1013	MOTCO-032_UNIT 7 MOSQUITO ABATEMENT DITC	SITE 00032
0696A.1014	MOTCO-033_LOST SLOUGH	SITE 00033
0696A.1019	MOTCO-004_ALLIED CHEMICAL SITE A	SITE 00004
0696A.1020	MOTCO-003_KILN SITE (LITIGATION AREA)	SITE 00003
0696A.1021	MOTCO-001_TIDAL AREA LANDFILL	SITE 001
0696A.1022	MOTCO-002_R AREA	SITE 002
0696A.1024	MOTCO-001A_TIDAL AREA LANDFILL GROUNDWAT	SITE 001A
0696A.1025	MOTCO-038_PORT CHICAGO MAIN STREET DUMP	SITE 038
0696A.1027	MOTCO-040_FORMER COPPER SMELTER	SITE 040
0696A.1046	MOTCO-031A_FORMER FERTILIZER PLANT GW	SITE 031A

MILITARY OCEAN TERMINAL CONCORD

INSTALLATION RESTORATION PROGRAM SITES

MOTCO-005 Allied Chemical Site B

WBS Element: 0696A.1004

Alias: SITE 00005

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 1/15/1999 RC Date: 5/15/1999

RC Reason: All Required Cleanup(s) Completed

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/15/1983	9/15/1983
SI	1/15/1985	1/15/1985
RI/FS	1/15/1989	1/15/1989
RD		
IRA		
RA(C)	9/15/1995	2/15/1999
RA(O)	1/15/1999	2/15/1999
LTM	2/15/2012	9/15/2048

Site Narrative

The Allied Chemical Site B is part of the Litigation Area. In the late-1960s and early-1970s, the Navy purchased several parcels of land to use as buffer zone for munitions loading operations. Eight of those parcels (307 acres) were subsequently found to contain metals contamination from waste disposal activities of the prior owners and historic spills from neighboring chemical companies. As a result, the Navy filed a lawsuit against the former property owners and reached a settlement that outlined cleanup responsibilities of the Navy and its neighbors. These parcels are now referred to as the Litigation Area. The Litigation Area consists primarily of tidal marshes with surrounding upland grassland and riparian areas, and supports significant populations of sensitive species, including the federal- and state-listed endangered salt marsh harvest mouse and California black rail. In 1991 the Navy and property owners entered into a consent decree. The parties agreed to clean up the properties to the soluble threshold limit concentration (STLC). Active remediation of the Litigation Area was conducted between 1992 and 1996. The Navy completed an remedial investigation (RI) of the Litigation Area and identified seven sites (3, 4, 5, 6, 25, 26, and 28) that required remedial action (RA) to address metals contamination in soil. The Navy grouped these sites into one of four remedial action sub-sites (RASS) and prepared an feasibility study (FS) to evaluate RA alternatives. The Navy excavated and disposed of contaminated soil from Sites 3, 4, 5, 6, 25, 26, and 28 between 1992 and 1996. As part of the remedial design (RD), the Navy implemented a monitoring plan to evaluate the effects and mobility of chemicals left in soil. From 1996 to 1999 the Navy performed the first four years of post-remediation monitoring, and divided the Litigation Area into 16 monitoring units. A five-year periodic review assessment was completed in 2000 and the 2006 five-year assessment was completed in 2010. The next five-year review is planned for 2020. Sites 3, 4, 5, 6, 25, 26, and 28 are currently in the twelfth year of post-remediation monitoring. Site 5 (RASS 1) occupies several acres adjacent to the former Allied Chemical Corp. facility. The soils were found to be contaminated with high levels of arsenic, copper, cadmium, iron and lead be contaminated with high levels of arsenic, copper, cadmium, iron and lead. The next five-year review will be performed in FY20. LTM will continue, assume 30 years of long-term management (LTM) per Defense Environmental Restoration Program (DERP) Guidance. The next five-year review will be performed in FY20.

MOTCO-006 Coke Pile Site

WBS Element: 0696A.1005

Alias: SITE 00006

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 1/15/1999 RC Date: 2/15/1999

RC Reason: All Required Cleanup(s) Completed

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/15/1983	9/15/1983
SI	1/15/1985	1/15/1985
RI/FS	1/15/1989	1/15/1989
RD		
IRA		
RA(C)	9/15/1995	1/15/1999
RA(O)	1/15/1999	2/15/1999
LTM	2/15/2012	9/15/2048

Site Narrative

The Coke Pile Site is part of the Litigation Area. In the late-1960s and early-1970s, the Navy purchased several parcels of land to use as buffer zone for munitions loading operations. Eight of those parcels (307 acres) were subsequently found to contain metals contamination from waste disposal activities of the prior owners and historic spills from neighboring chemical companies. As a result, the Navy filed a lawsuit against the former property owners and reached a settlement that outlined cleanup responsibilities of the Navy and its neighbors. These parcels are now referred to as the Litigation Area. The Litigation Area consists primarily of tidal marshes with surrounding upland grassland and riparian areas, and supports significant populations of sensitive species, including the federal and state-listed endangered salt marsh harvest mouse and California black rail. In 1991 the Navy and property owners entered into a consent decree. The parties agreed to clean up the properties to the STLC. Active remediation of the Litigation Area was conducted between 1992 and 1996. The Navy completed an RI of the Litigation Area and identified seven sites (3, 4, 5, 6, 25, 26, and 28) that required RA to address metals contamination in soil. The Navy grouped these sites into one of four RASS and prepared an FS to evaluate RA alternatives. The Navy excavated and disposed of contaminated soil from Sites 3, 4, 5, 6, 25, 26, and 28 between 1992 and 1996. As part of the RD, the Navy implemented a monitoring plan to evaluate the effects and mobility of chemicals left in soil. From 1996 to 1999 the Navy performed the first four years of postremediation monitoring, and divided the Litigation Area into 16 monitoring units. A five-year periodic review assessment was completed in 2000 and the 2006 five-year assessment was completed in 2010. The next five-year review assessment was started in 2015 and finalized in 2016. Sites 3, 4, 5, 6, 25, 26, and 28 are eleventh year of revised post-remediation monitoring. Site 6 (RASS 4) occupies 5 acres west of the former Allied Chemical Corp. facility. The soil was found to be contaminated with high levels of arsenic, copper, cadmium, iron and lead. The next five-year review will be performed in FY20. LTM will continue, assume 30 years of LTM per DERP Guidance. The next five-year review will be performed in FY20.

MOTCO-009 Froid and Taylor Roads

WBS Element: 0696A.1006

Alias: SITE 00009

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned

RIP Date: - -

RC Date: 9/30/2011

RC Reason: Study Completed, No Cleanup Required

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/31/1983	9/30/1983
SI	1/31/1984	6/30/1985
RI/FS	1/31/2000	9/30/2011
RD		
IRA		
RA(C)		
RA(O)		
LTM	9/30/2011	9/30/2048

Site Narrative

The R Area (Military Ocean Terminal Concord (MOTCO)-002), Froid & Taylor Roads (MOTCO-009), and Wood Hogger Site (MOTCO-011), (formerly known as Sites 2, 9, and 11) are collectively called the Tidal Area Sites and include both wetland and upland areas. From the mid-1940s to the mid-1970s, various types of disposal and incineration occurred at these sites. Site MOTCO-009 is an area of about 800 by 300 feet that is bisected by Froid Road. The site is bordered by Taylor Boulevard on the east, MOTCO-011 on the southwest, and an unnamed dirt and asphalt road on the northwest. A small, upland area north of Froid Road contains a fragment of ruderal habitat dominated by grasses and weeds. The area south of Froid Road contains a pond surrounded by a small wetland, which is the remnant channel of Otter Slough. When the tidal gate at Otter Slough was functional, bay water was prevented from entering Otter Slough during all but the most extreme high tides. Consequently MOTCO-009 received tidal inflow only occasionally and was kept wet mainly by winter rains. During dry summers, surface water gradually diminished and became more saline. Surface water elevations in recent years have risen because the Otter Slough tide gate structure no longer restricts tidal flow. Taylor Boulevard is the major access roadway for the Tidal Area, so vehicles pass site -009 daily. This site is the former location of a miscellaneous scrap metal depository. A piece of ordnance, that was later identified as a spent five-inch white phosphorus rocket round, was found on the shoulder of Froid Road during the initial assessment study, near its intersection with Taylor Boulevard. An investigation of the surrounding area revealed scrap metal and other debris in the area south of the intersection of the two roads. Although no specific incidents of hazardous materials disposal were linked directly to this site, its proximity to the other sites made it an area of concern (AOC) during the initial assessment study. Based on the history of the site, groundwater, surface water, soil, and sediment samples were collected the following chemicals were identified as contaminants of concern (COC): metals, organochlorine (OC) pesticides, and polychlorinated biphenyls (PCB). The Army agreed to US Environmental Protection Agency's (USEPA) request to address potentially unacceptable risks to human health for unrestricted (residential) exposure to soil or sediment by proceeding to this FS and evaluating remedial action by land use controls (LUC) or other potentially applicable means. Site 9 does not pose unacceptable risk to humans under industrial exposure

scenario assumptions. Site 9 does not pose an unacceptable risk to the environment. As a result, no action is required to address ecological risk at Site 9. The next five-year review will be performed in FY20.

MOTCO-011_Wood Hogger Site

WBS Element: 0696A.1007

Alias: SITE 00011

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 9/15/2013 RC Date: 9/15/2013

RC Reason: All Required Cleanup(s) Completed

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/15/1983	9/15/1983
SI	1/15/1984	6/15/1985
RI/FS	1/15/1998	7/15/2011
RD		
IRA		
RA(C)	3/15/2012	9/15/2013
RA(O)		
LTM	10/15/2013	9/15/2020

Site Narrative

During the 1990s the Navy completed an SI: collected soil, groundwater, and surface water for analysis as part of the RI and submitted an RI report and ecological risk assessment (ERA) for the sites formerly known as 2, 9 and 11. In 2003, the Navy and the regulatory agencies agreed additional samples should be collected to complete the RI report. The Navy collected additional samples and issued the updated revised draft final RI report in January 2008 and the final RI report was submitted in August 2008. The Army and the regulatory agencies agreed that Sites 2 and 9, should close under the up-coming record of decision (ROD) and Site 11 should proceed to an RD/RA to address risk to humans from contaminated soil. The Army agreed to USEPA's request to address potentially unacceptable risks to human health for unrestricted (residential) exposure to soil or sediment by producing in the FS an evaluation of RAs by LUCs or other potentially applicable means. MOTCO-011 does not pose unacceptable risk to humans under industrial exposure scenario assumptions. Soil and sediment at Site 11 contaminated with mercury poses unacceptable risk to benthic invertebrates and upper trophic level receptors. As a result, Site 11 was recommended for RA to address the unacceptable risk. The preferred RA documented in the June 2012 final ROD included LUCs at Sites 2 and 9 and removal of mercury contaminated soils followed by LUCs at Site 11. Excavation and offsite disposal of approximately 3,000 cubic yards of mercurycontaminated soil and sediment at Site 11 was completed in January 2013. The LUCs for Sites 2, 9, and 11 are limited to prohibiting residential development. The Army will monitor the land use restrictions annually. The annual monitoring reports will be incorporated into the five-year review reports, which evaluate the status of the LUCs and LUC compliance. The next five-year review will be performed in FY20.

MOTCO-025 K-2 Area

WBS Element: 0696A.1008

Alias: SITE 00025

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 1/15/1999 RC Date: 2/15/1999

RC Reason: All Required Cleanup(s) Completed

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/15/1983	9/15/1983
SI	1/15/1985	1/15/1985
RI/FS	9/15/1989	9/15/1989
RD		
IRA		
RA(C)	9/15/1995	2/15/1999
RA(O)	1/15/1999	2/15/1999
LTM	2/15/2012	9/15/2048

Site Narrative

The K-2 Area is part of the Litigation Area. In the late-1960s and early-1970s, the Navy purchased several parcels of land to use as buffer zone for munitions loading operations. Eight of those parcels (307 acres) were subsequently found to contain metals contamination from waste disposal activities of the prior owners and historic spills from neighboring chemical companies. As a result, the Navy filed a lawsuit against the former property owners and reached a settlement that outlined cleanup responsibilities of the Navy and its neighbors. These parcels are now referred to as the Litigation Area. The Litigation Area consists primarily of tidal marshes with surrounding upland grassland and riparian areas, and supports significant populations of sensitive species, including the federal and state-listed endangered salt marsh harvest mouse and California black rail. In 1991, the Navy and property owners entered into a consent decree. The parties agreed to clean up the properties to the STLC. Active remediation of the Litigation Area was conducted between 1992 and 1996. The Navy completed an RI of the Litigation Area and identified seven sites (3, 4, 5, 6, 25, 26, and 28) that required RA to address metals contamination in soil. The Navy grouped these sites into one of four RASS and prepared an FS to evaluate RA alternatives. The Navy excavated and disposed of contaminated soil from Sites 3, 4, 5, 6, 25, 26, and 28 between 1992 and 1996. As part of the RD, the Navy implemented a monitoring plan to evaluate the effects and mobility of chemicals left in soil. From 1996 to 1999, the Navy performed the first four years of postremediation monitoring, and divided the Litigation Area into 16 monitoring units. Site 25 (RASS 3) lies along Nichols Creek. Chemical companies at one time dumped waste into Nichols Creek, resulting in the contamination at the site. The soil was found to be contaminated with high levels of arsenic, copper. cadmium, iron and lead. A five-year periodic review assessment was completed in 2000 and the 2006 five-year assessment was completed in 2010. A five-year review assessment was started in 2015 and completed in 2016. Sites 3, 4, 5, 6, 25, 26, and 28 are currently in the eleventh year of revised postremediation monitoring. The next five-year review will be performed in FY20.

MOTCO-026 G-1 Area

WBS Element: 0696A.1009

Alias: SITE 00026

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 1/15/1999 RC Date: 2/15/1999

RC Reason: All Required Cleanup(s) Completed

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/15/1983	9/15/1983
SI	1/15/1985	1/15/1985
RI/FS	1/15/1989	1/15/1989
RD		
IRA		
RA(C)	9/15/1995	2/15/1999
RA(O)	1/15/1999	2/15/1999
LTM	2/15/2012	9/15/2048

Site Narrative

In the late-1960s and early-1970s, the Navy purchased several parcels of land to use as buffer zone for munitions loading operations. Eight of those parcels (307 acres) were subsequently found to contain metals contamination from waste disposal activities of the prior owners and historic spills from neighboring chemical companies. Those parcels are now referred to as the Litigation Areas. In 1991 the Navy and property owners entered into a consent decree. The parties agreed to clean up the properties to the STLC. Active remediation of the Litigation Area was conducted between 1992 and 1996. The Navy completed an RI of the Litigation Area and identified seven sites (3, 4, 5, 6, 25, 26, and 28) that required RA to address metals contamination in soil. The Navy grouped these sites into one of four RASS and prepared an FS to evaluate RA alternatives. The Navy excavated and disposed of contaminated soil from Sites 3, 4, 5, 6, 25, 26, and 28 between 1992 and 1996. The RD included a monitoring plan to monitor the effect and mobility of chemicals left in place. From 1995 to 1999, the Navy performed five years of postremediation monitoring. A five-year periodic review assessment was conducted in 2000. Sites 3, 4, 5, 6, 25, 26, and 28 are currently in the eighth year of post-remediation monitoring. Site 26 (RASS 3), a sixacre site, was previously owned by Getty Oil. The soils were found to be contaminated with high levels of zinc and lead at the bottom of a sump. A five-year periodic review assessment was completed in 2000, 2006 and 2016. Sites 3, 4, 5, 6, 25, 26, and 28 are currently in the eleventh year of revised postremediation monitoring. The next five-year review will be performed in FY20.

MOTCO-028 Litigation Area Monitoring

WBS Element: 0696A.1010

Alias: SITE 00028

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 1/15/1999 RC Date: 2/15/1999

RC Reason: All Required Cleanup(s) Completed

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$30,179,565.62

Phases	Start	End
PA	1/15/1983	9/15/1983
SI	1/15/1985	1/15/1985
RI/FS	1/15/1989	1/15/1989
RD		
IRA		
RA(C)	9/15/1995	2/15/1999
RA(O)	1/15/1999	2/15/1999
LTM	12/15/1999	9/15/2048

Site Narrative

In the late-1960s and early-1970s, the Navy purchased several parcels of land to use as buffer zone for munitions loading operations. Eight of those parcels (307 acres) were subsequently found to contain metals contamination from waste disposal activities of the prior owners and historic spills from neighboring chemical companies. As a result, the Navy filed a lawsuit against the former property owners and reached a settlement that outlined cleanup responsibilities of the Navy and its neighbors. These parcels are now referred to as the Litigation Area. The Litigation Area consists primarily of tidal marshes with surrounding upland grassland and riparian areas, and supports significant populations of sensitive species, including the federal and state-listed endangered salt marsh harvest mouse and California black rail. In 1991, the Navy and property owners entered into a consent decree. The parties agreed to clean up the properties to the STLC. Active remediation of the Litigation Area was conducted between 1992 and 1996. The Navy completed an RI of the Litigation Area and identified seven sites (3, 4, 5, 6, 25, 26, and 28) that required RA to address metals contamination in soil. The Navy grouped these sites into one of four RASS and prepared an FS to evaluate RA alternatives. The Navy excavated and disposed of contaminated soil from Sites 3, 4, 5, 6, 25, 26, and 28 between 1992 and 1996. As part of the RD, the Navy implemented a monitoring plan to evaluate the effects and mobility of chemicals left in soil. From 1996 to 1999, the Navy performed the first four years of post-remediation monitoring, and divided the Litigation Area into 16 monitoring units. Site 28 (RASS 3, also known as Site 34 in the supplemental FS) occupies several acres adjacent to the former Chemical Pigment Corp. and the former ESI Chemical Corp. facilities. The soil was found to be contaminated with high levels of arsenic, copper, cadmium. selenium, zinc, and lead. This site is where LTM costs are captured for Sites 3, 4, 5, 6, 25, 26, and 28. The sites are under a single monitoring agreement as part of a ROD with the regulators. The five-year review costs for the next five-year review is in the cost-to-complete estimate. A five-year periodic review assessment was completed in 2000 and the 2006 five-year assessment was completed in 2010. The last five-year assessment was started in 2015 and was finalized in 2016 and submitted to regulatory agencies. Sites 3, 4, 5, 6, 25, 26, and 28 are currently in the sixteenth year of post-remediation monitoring (five years post-remediation monitoring and 12 years of revised post-remediation monitoring). The next

five-year review will be performed in FY Guidance.	20. LTM will continue, assume 30 ye	ears of LTM per DERP

MOTCO-031_Former Fertilizer Plant

WBS Element: 0696A.1012

Alias: SITE 00031

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 9/15/2018 RC Date: 9/15/2018

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$1,916,680.39

Phases	Start	End
PA	1/15/1983	9/15/1983
SI	8/15/1998	7/15/2002
RI/FS	4/15/2002	3/15/2012
RD	4/30/2012	12/15/2012
IRA		
RA(C)	9/15/2012	9/15/2018
RA(O)		
LTM	9/15/2018	12/15/2048

Site Narrative

Site 31, a 17-acre site located near the Litigation Area site in the northeast portion of the installation, was used as a fertilizer plant from 1955 to 1976. The Navy acquired the property in 1983 to maintain a safety buffer around the munitions operations. The Navy first became aware of the contamination at the site when the Contra Costa water district installed a pump station on the site in 1998. Soil samples collected showed high levels of arsenic, selenium, lead and mercury. In 2002, 2,100 cubic yards of soil were excavated for disposal. To assess the potential risk to ecological and human receptors, the Army completed an RI and an FS in December 2011. A contract for the remedial action (construction) [RA(C)] was awarded in September 2012. The performance work statement will take the site through closure in FY17. The signed ROD was finalized in June 2015. Groundwater investigations are handled under MOTCO-031A. Per the ROD, the selected remedy is excavation and off-site disposal of 32,000 cubic yards of contaminated soil. Soil removal is scheduled for Spring 2018, anticipated to be completed by July 2018. LTM is anticipated to follow.

MOTCO-032 Unit 7 Mosquito Abatement Ditc

WBS Element: 0696A.1013

Alias: SITE 00032

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 12/15/2015 RC Date: 12/15/2015

RC Reason: All Required Cleanup(s) Completed

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/15/1983	9/15/1983
SI	1/15/1984	12/15/1985
RI/FS	1/15/1986	1/15/2012
RD	5/15/2009	1/15/2012
IRA		
RA(C)	3/15/2011	12/15/2015
RA(O)		
LTM	12/15/2015	9/15/2048

Site Narrative

The Unit 7 Mosquito Abatement Ditches are part of the Litigation Area. In the late-1960s and early-1970s, the Navy purchased several parcels of land to use as buffer zone for munitions loading operations. Eight of those parcels (307 acres) were subsequently found to contain metals contamination from waste disposal activities of the prior owners and historic spills from neighboring chemical companies. As a result, the Navy filed a lawsuit against the former property owners and reached a settlement that outlined cleanup responsibilities of the Navy and its neighbors. These parcels are now referred to as the Litigation Area. The Litigation Area consists primarily of tidal marshes with surrounding upland grassland and riparian areas, and supports significant populations of sensitive species, including the federal and statelisted endangered salt marsh harvest mouse and California black rail. In 1991 the Navy and property owners entered into a consent decree. The parties agreed to clean up the properties to the STLC. Active remediation of the litigation area was conducted between 1992 and 1996. The Navy completed an RI of the Litigation Area and identified seven sites (3, 4, 5, 6, 25, 26, and 28) that required RA to address metals contamination in soil. The Navy grouped these sites into one of four RASS and prepared an FS to evaluate RA alternatives. The Navy excavated and disposed of contaminated soil from Sites 3, 4, 5, 6, 25, 26, and 28 between 1992 and 1996. As part of the RD, the Navy implemented a monitoring plan to evaluate the effects and mobility of chemicals left in soil. From 1996 to 1999, the Navy performed the first four years of post-remediation monitoring, and divided the Litigation Area into 16 monitoring units. The 2010 five-year review identified Site 33 as an area not protective of ecological receptors and the Navy began a supplemental FS to assess the possible RAs for the site. The Army and regulatory agencies have agreed to supplemental FS. A submitted proposed plan (PP) and signed ROD for the sediment capping of the contaminated portion of the slough was completed in January 2013. The RA(C) fieldwork was completed in November 2015. The remedial action completion report (RACR) was finalized in August 2018. First round LTM report was submitted to regulatory agencies for review in January 2019.

MOTCO-033 Lost Slough

WBS Element: 0696A.1014

Alias: SITE 00033

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 12/15/2015 RC Date: 12/15/2015

RC Reason: All Required Cleanup(s) Completed

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/15/1983	9/15/1983
SI	1/15/1984	3/15/1985
RI/FS	6/15/1986	1/15/2012
RD	5/15/2009	1/15/2012
IRA		
RA(C)	1/15/2011	12/15/2015
RA(O)		
LTM	12/15/2015	9/15/2048

Site Narrative

Unit 10 of the Lost Slough is part of the Litigation Area. In the late-1960s and early-1970s, the Navy purchased several parcels of land to use as buffer zone for munitions loading operations. Eight of those parcels (307 acres) were subsequently found to contain metals contamination from waste disposal activities of the prior owners and historic spills from neighboring chemical companies. As a result, the Navy filed a lawsuit against the former property owners and reached a settlement that outlined cleanup responsibilities of the Navy and its neighbors. These parcels are now referred to as the Litigation Area. The Litigation Area consists primarily of tidal marshes with surrounding upland grassland and riparian areas, and supports significant populations of sensitive species, including the federal and state-listed endangered salt marsh harvest mouse and California black rail. In 1991 the Navy and property owners entered into a consent decree. The parties agreed to clean up the properties to the STLC. Active remediation of the litigation area was conducted between 1992 and 1996. The Navy completed an RI of the Litigation Area and identified seven sites (3, 4, 5, 6, 25, 26, and 28) that required RA to address metals contamination in soil. The Navy grouped these sites into one of four RASS and prepared an FS to evaluate RA alternatives. The Navy excavated and disposed of contaminated soil from Sites 3, 4, 5, 6, 25, 26, and 28 between 1992 and 1996. As part of the RD, the Navy implemented a monitoring plan to evaluate the effects and mobility of chemicals left in soil. From 1996 to 1999, the Navy performed the first four years of post-remediation monitoring, and divided the Litigation Area into 16 monitoring units. The 2010 five-year review identified Site 33 as an area not protective of ecological receptors and the Navy began a supplemental FS to assess the possible RAs for the site. The Army and regulatory agencies have agreed to supplemental FS. A submitted PP and signed ROD for the sediment capping of the contaminated portion of the slough was completed in January 2013. The RA(C) fieldwork was completed in November 2015. The RACR was finalized in August 2018. First round LTM report was submitted to regulatory agencies for review in January 2019.

MOTCO-004 Allied Chemical Site A

WBS Element: 0696A.1019

Alias: SITE 00004

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 1/15/1999 RC Date: 6/15/1999

RC Reason: All Required Cleanup(s) Completed

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/15/1983	9/15/1983
SI	1/15/1985	1/15/1985
RI/FS	1/15/1989	1/15/1989
RD		
IRA		
RA(C)	9/15/1995	4/15/1999
RA(O)	1/15/1999	5/15/1999
LTM	2/15/2012	9/15/2048

Site Narrative

The Allied Chemical Site A is part of the Litigation Area. In the late-1960s and early-1970s, the Navy purchased several parcels of land to use as buffer zone for munitions loading operations. Eight of those parcels (307 acres) were subsequently found to contain metals contamination from waste disposal activities of the prior owners and historic spills from neighboring chemical companies. As a result, the Navy filed a lawsuit against the former property owners and reached a settlement that outlined cleanup responsibilities of the Navy and its neighbors. These parcels are now referred to as the Litigation Area. The Litigation Area consists primarily of tidal marshes with surrounding upland grassland and riparian areas, and supports significant populations of sensitive species, including the federal and state-listed endangered salt marsh harvest mouse and California black rail. In 1991, the Navy and property owners entered into a consent decree. The parties agreed to clean up the properties to the STLC. Active remediation of the Litigation Area was conducted between 1992 and 1996. The Navy completed an RI of the Litigation Area and identified seven sites (3, 4, 5, 6, 25, 26, and 28) that required RA to address metals contamination in soil. The Navy grouped these sites into one of four RASS and prepared an FS to evaluate RA alternatives. The Navy excavated and disposed of contaminated soil from Sites 3, 4, 5, 6, 25, 26, and 28 between 1992 and 1996. As part of the RD, the Navy implemented a monitoring plan to evaluate the effects and mobility of chemicals left in soil. From 1996 to 1999, the Navy performed the first four years of post-remediation monitoring, and divided the Litigation Area into 16 monitoring units. A fiveyear periodic review assessment was completed in 2000 and the 2006 five-year assessment was completed in 2010. The next five-year assessment was started in 2015 and completed in 2016. Sites 3, 4, 5, 6, 25, 26, and 28 are currently in the eleventh year of revised post-remediation monitoring. Site 4 (RASS 1) occupies several acres adjacent to the former Allied Chemical Corp. facility. The soils were found to be contaminated with high levels of arsenic, copper, cadmium, iron and lead. The next five-year review will be performed in FY20.

MOTCO-003 Kiln Site (Litigation Area)

WBS Element: 0696A.1020

Alias: SITE 00003

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 4/15/1999 RC Date: 5/15/1999

RC Reason: All Required Cleanup(s) Completed

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/15/1983	9/15/1983
SI	1/15/1985	12/15/1986
RI/FS	1/15/1989	3/15/1999
RD		
IRA		
RA(C)	9/15/1995	5/15/1999
RA(O)	4/15/1999	5/15/1999
LTM	2/15/2012	9/15/2048

Site Narrative

The Kiln Site is part of the Litigation Area. In the late-1960s and early-1970s, the Navy purchased several parcels of land to use as buffer zone for munitions loading operations. Eight of those parcels (307 acres) were subsequently found to contain metals contamination from waste disposal activities of the prior owners and historic spills from neighboring chemical companies. As a result, the Navy filed a lawsuit against the former property owners and reached a settlement that outlined cleanup responsibilities of the Navy and its neighbors. These parcels are now referred to as the Litigation Area. The Litigation Area consists primarily of tidal marshes with surrounding upland grassland and riparian areas, and supports significant populations of sensitive species, including the federal and state-listed endangered salt marsh harvest mouse and California black rail. In 1991 the Navy and property owners entered into a consent decree. The parties agreed to clean up the properties to the STLC. Active remediation of the Litigation Area was conducted between 1992 and 1996. The Navy completed an RI of the Litigation Area and identified seven sites (3, 4, 5, 6, 25, 26, and 28) that required RA to address metals contamination in the soil. The Navy grouped these sites into one of four RASS and prepared an FS to evaluate RA alternatives. The Navy excavated and disposed of contaminated soil from Sites 3, 4, 5, 6, 25, 26, and 28 between 1992 and 1996. As part of the RD, the Navy implemented a monitoring plan to evaluate the effects and mobility of chemicals left in soil. From 1996 to 1999 the Navy performed the first four years of post remediation monitoring, and divided the Litigation Area into 16 monitoring units. A five-year periodic review assessment was completed in 2000 and the 2006 five-year assessment was completed in 2010. The next five-year assessment was started in 2015 and completed in 2016. Sites 3, 4, 5, 6, 25, 26, and 28 are currently in the eleventh year of revised post-remediation monitoring. The next five-year review will be performed in FY20.

MOTCO-001_Tidal Area Landfill

WBS Element: 0696A.1021

Alias: SITE 001

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 10/15/2012 RC Date: 10/15/2012

RC Reason: All Required Cleanup(s) Completed

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/15/1992	1/15/1993
SI	1/15/1994	1/15/1995
RI/FS	1/15/1998	5/15/2008
RD	6/15/2008	9/15/2008
IRA		
RA(C)	6/15/2008	10/15/2012
RA(O)		
LTM	1/15/2013	9/15/2048

Site Narrative

The Tidal Area Landfill served as the primary disposal area for the Navy and surrounding communities from 1944 to 1979. The landfill is approximately 13 acres and contains an estimated 135,000 cubic yards of waste and soil cover. Munitions and explosives of concern (MEC) were found in the landfill in June 2006. Through the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) process, the Navy and regulatory agencies agreed the landfill should be covered. Construction of the cover began in April 2006. During excavation, MEC were unearthed, and the Navy stopped work and revised the cover design to eliminate the need for excavation. The Navy prepared an explanation of significant difference (ESD) to the ROD that describes the design changes (larger footprint and higher landfill), provides the reasons for the changes, and presents revised drawings. The Army has redesigned the landfill cap and took over direct management of the landfill closure. The draft final ESD became available to the public in September 2011. The final ESD was signed in December 2012. The cap construction was completed in June 2012. The post-closure maintenance plan was approved in March 2012. An approved RA(C) completion report was completed in December 2015. LTM continues as part of the Post-Closure plan. The next five-year review will be performed in FY20. An ESD will be started in FY19 to add groundwater monitoring to be conducted as part of the LTM for this site.

MOTCO-002 R Area

WBS Element: 0696A.1022

Alias: SITE 002

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned

RIP Date: - -

RC Date: 9/15/2011

RC Reason: Study Completed, No Cleanup Required

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/15/1983	9/15/1983
SI	1/15/1993	9/15/1993
RI/FS	3/15/1996	9/15/2011
RD		
IRA		
RA(C)		
RA(O)		
LTM	2/15/2012	9/15/2048

Site Narrative

R Area (MOTCO-002). Froid and Taylor Roads (MOTCO-009), and Wood Hogger Site (MOTCO-011) (formerly known as Sites 2, 9, and 11) are collectively called the Tidal Area Sites and include both wetland and upland areas. In 1939, prior to Navy ownership, a meandering, east-west-trending slough flowed across the wetlands and marshlands of what is now M OTCO-002. A man-made sluice was constructed to channel water from MOTCO-002 to Suisun Bay. During construction of Naval Weapons Station (NAVWPNSTA) Seal Beach Detachment (DET) Concord, the sluice, now known as Otter Slough, was backfilled and rerouted around MOTCO-002 and -011. From the mid-1940s to the mid-1970s, various types of disposal and incineration occurred at these sites. MOTCO-002 was formerly used as a disposal area for materials used to repackage munitions, including wood packing crates, munitions containers, steel banding, paint waste, and wood debris. From the late-1940s until about 1976, the area adjacent on the eastern side of Baker Road was used for disposal of materials generated during segregation of conventional munitions returned from Pacific operations. Segregation waste, including metal munitions casings and cans, and miscellaneous debris were observed during the RI on the ground surface and submerged beneath the water along Baker Road. Based on the history of the site, groundwater, surface water, soil, and sediment samples were collected. The following chemicals were identified as COCs: metals, OC pesticides, and PCB. R Area is surrounded by levees or developed land and consists of a large pond fringed with brackish and salt marsh habitat. Portions of the levee bordering the west side of the site (Baker Road) have settled and eroded so that standing water is now present year-round throughout most of R Area. The site is flooded during high tide. With the exception of personnel conducting environmental studies and possibly people maintaining an aboveground water line that crosses the property, the site is no longer used. The final PP was completed in March 2011 and the final ROD was signed in October 2011. The Army agreed to USEPA's request to address potentially unacceptable risks to human health for unrestricted (residential) exposure to soil or sediment by proceeding to an FS to evaluate RA by LUCs or other potentially applicable actions. MOTCO-002 does not pose an unacceptable ecological risk to the environment or animal receptors. As a result, no action is required to address ecological risk. The preferred remedial action documented in the June 2012 ROD

included LUCs at Sites 2 and 9 and removal of mercury-contaminated soils followed by LUCs at Site 11. Excavation and offsite disposal of approximately 3 ,000 cubic yards of mercury-contaminated soil and sediment at Site 11 was completed in January 2013. The LUCs for Sites 2, 9, and 11 are limited to prohibiting residential development. The Army will monitor the land use restrictions annually. The annual monitoring reports will be incorporated into the five-year review reports, which evaluate the status of the LUCs and LUC compliance. The next five-year review will be performed in FY20. A ROD will be started in FY19 to complete site closure.

MOTCO-001A_Tidal Area Landfill Groundwater

WBS Element: 0696A.1024

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned

RIP Date: - -

RC Date: 10/15/2019
RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/15/1992	1/15/1993
SI	1/15/1994	1/15/1995
RI/FS	12/15/2010	10/15/2019
RD		
IRA		
RA(C)		
RA(O)		
LTM		

Site Narrative

This site encompasses the groundwater portion of site MOTCO-001. The tidal area landfill served as the primary disposal area for the Navy and surrounding communities from 1944 to 1979. The landfill is approximately 13 acres and contains an estimated 135,000 cubic yards of waste and soil cover. A performance-based acquisition (PBA) contract was awarded to complete the final RI report on the groundwater. The work plan has been prepared and submitted to regulatory review. The revised draft final groundwater RI report was submitted for agency review in July 2015. The final RI was submitted in October 2016. The site has been recommeded for closure. A Proposed Plan, and ROD will be started in 2019 to close out the site.

MOTCO-038_Port Chicago Main Street Dump

WBS Element: 0696A.1025

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 9/30/2022 RC Date: 9/30/2022

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$48,788,554.26

Phases	Start	End
PA	1/15/2008	1/15/2008
SI	6/15/2010	6/15/2012
RI/FS	6/15/2014	9/15/2020
RD		
IRA		
RA(C)	1/15/2021	9/30/2022
RA(O)		
LTM	9/30/2022	9/30/2052

Site Narrative

The former Main Street Dump area is located in the Tidal Area along Main Street in the former civilian community of Port Chicago. The dump site is located in an open, grassy area that is approximately 12 acres in size. Debris includes creosote painted railroad ties, demolition debris, and railroad wastes. An underground fire occurred at the site as the result of a brush fire. The Army has completed an SI which recommended that an RI/FS be conducted to evaluate the risk and the agencies have concurred. The RI/FS will generate a more complete understanding of the nature and extent of contamination associated with wastes present at Site 38. With the advantage of more detailed site information, a more complete human health risk assessment and a more complete ecological risk assessment can be performed to determine if remedial action is appropriate for the contaminated wastes, soils, and groundwater at Site 38. The RI field work was started in Late 2016. Quarterly sampling is underway. Draft RI Report submitted for regulatory review March 2018. Regulators have recommend further RI investigation for the historic Port Chicago Town Site. This is approximately another 170 acres.

MOTCO-040 Former Copper Smelter

WBS Element: 0696A.1027

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 9/15/2021 RC Date: 9/15/2021

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$5,021,156.78

Phases	Start	End
PA	1/15/2008	1/15/2008
SI	6/15/2010	6/15/2012
RI/FS	6/15/2015	9/15/2020
RD		
IRA		
RA(C)	1/15/2020	9/15/2021
RA(O)		
LTM	10/15/2021	10/15/2051

Site Narrative

The Former Copper Smelter is was part of a 19th century ship building operation located on Seal Bluff. The potential concern is heavy metal contamination of soil and sediment. The SI work plan was submitted to the regulatory team and fieldwork began in October 2011, and the final SI report was completed in June 2012. Data from the SI indicates heavy metals are present at levels that will require a RI/FS. The RI/FS will generate a more complete understanding of the nature and extent of contamination associated with wastes present at Site 40. With the advantage of more detailed site information, a more complete human health risk assessment and a more complete ecological risk assessment can be performed to determine if remedial action is appropriate for the contaminated wastes, soils, and groundwater at Site 40. RI currently underway. Because of planned Military Communication (MILCOM) construction in 2020, a time critical removal action (TCRA) is required.

MOTCO-031A FORMER FERTILIZER PLANT GW

WBS Element: 0696A.1046

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned

RIP Date: - -

RC Date: 12/15/2019
RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/15/1995	9/15/1995
SI	1/15/1995	9/15/1995
RI/FS	3/15/2013	12/15/2019
RD		
IRA		
RA(C)		
RA(O)		
LTM		

Site Narrative

Site is limited to the groundwater aspects of MOTCO-031. The site was created out of MOTCO-031 at the request of the federal facility agreement (FFA) signatory parties after the RI/FS recommended further RI work be completed for groundwater. Site MOTCO-031A has the same background and site boundaries as MOTCO-031. A contract for the RI/FS was awarded in September 2012. The RI/FS, PP, and ROD are planned for completion in late 2018.

MILITARY OCEAN TERMINAL CONCORD

MILITARY MUNITIONS RESPONSE PROGRAM SITES

MOTCO-007-R-01 Explosive Ordnance Displo

WBS Element: 0696A.1001

Alias: UXO 00007

Regulatory Driver: CERCLA

RRSE: Not assigned
MRSPP: Not assigned
RIP Date: 12/31/2017
RC Date: 12/31/2025

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: MR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/1/2005	7/1/2007
SI	9/30/2009	1/31/2011
RI/FS	3/31/2011	12/31/2025
RD		
IRA		
RA(C)		
RA(O)		
LTM		

Site Narrative

The explosive ordnance (EOD) Q Area covers 135 acres and was reported to have been used as an open burn/open detonation area beginning in the 1970s. Due to its location, there is also the potential for munitions relating to the 1944 explosion to be found at this site. In order to characterize the site, an Army SI was initiated in 2009 and completed in January 2011. The RI/FS contract was awarded, and the contractor began work in July 2011 and the fieldwork began in September 2012 and was completed in summer 2014. Future cleanup is not anticipated. The draft RI was issued in April 2015. The RI report was disputed by the USEPA in December 2015. The Army and the regulatory agencies have met on a number of occasions to resolve the dispute and are close to resolution. The date of the final RI is to be established based on the informal dispute resolution.

MOTCO-008-R-01_Port Chicago Tidal Area E

WBS Element: 0696A.1002

Alias: UXO 00008

Regulatory Driver: CERCLA

RRSE: Not assigned
MRSPP: Not assigned
RIP Date: 12/31/9999
RC Date: 12/15/2025

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: MR

Cost-to-Complete: \$0.00

Phases	Start	End
PA	1/1/2005	7/1/2007
SI	9/30/2009	1/31/2011
RI/FS	3/31/2011	12/31/2025
RD		
IRA		
RA(C)		
RA(O)		
LTM		

Site Narrative

The Port Chicago Tidal Area encompasses terrestrial portions of the Tidal Area and associated islands in Suisun Bay that are within the impact area of the 1944 explosion. Site MOTCO-008 encompasses 5,232 acres. The Port Chicago Tidal Area had been in use as an ammunition transfer facility from 1942 to the present. The RI/FS contract was awarded and fieldwork began in September 2012 and was completed in October 2014. Although future cleanup is anticipated, cost and technologies cannot accurately be determined until the RI/FS is complete. The draft RI was issued in April 2015. The RI report was disputed by the USEPA in December 2015. The Army and the regulatory agencies have met on a number of occasions to resolve the dispute and are close to resolution. The date of the final RI is to be established based on the informal dispute resolution.

MOTCO-010-R-01_Suisun Bay Impact Area

WBS Element: 0696A.1003

Alias: UXO 00010

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 12/31/9999 RC Date: 1/31/2025

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: MR

Cost-to-Complete: \$707,627.46

Phases	Start	End
PA	1/1/2005	7/1/2007
SI	9/30/2009	1/31/2011
RI/FS	3/31/2011	1/31/2025
RD		
IRA		
RA(C)		
RA(O)		
LTM	1/31/2025	1/31/2055

Site Narrative

Site MOTCO-010, Suisun Bay Impact Area encompasses 5,018 aquatic acres in Suisun Bay and extends from the former pier to the west, north and east in a 12,000 foot radius. After the 1944 explosion, the US Coast Guard surveyed near the pier and reported the bottom to be heavily littered with metal debris and MEC/MC. The primary MC of concern include cyclotrimethylenetrinitramine (RDX), trinitrotoluene (TNT), and aluminum (from MK47 depth bombs and MK49 depth bombs). In order to characterize the site, an Army SI was initiated in 2009 and completed in January 2011. The RI/FS contract was awarded and the contractor began work in July 2011. The RI fieldwork was completed in October 2014. The draft RI was issued in April 2015. The RI report was disputed by the USEPA in December 2015. The Army and the regulatory agencies have met on a number of occasions to resolve the dispute and are close to resolution. The date of the final RI is to be established based on the informal dispute resolution. The dispute is unresolved at this time. Two historical record reviews (HRR) one for boxcars and one for dredge spoils are being prepared by USACE St. Louis.

COMMUNITY INVOLVEMENT

Technical Review Committee (TRC) Establishment Date:	N/A
Community Involvement Plan (Date Published):	2/1/2012
Restoration Advisory Board (RAB) Establishment Date:	1/31/2009
RAB Adjournment Date:	N/A
RAB Adjournment Reason:	N/A
Additional Community Involvement:	The first RAB meeting was held in March 2009. The RAB will be meeting six times per year. The Army completed a new CIP in February 2012. The 2012 CIP guides the community involvement for the Tidal Area.
Administrative Record is located at:	MOTCO 410 Norman Ave Concord, CA 94520 Phone number: (925) 246-4024
Information Repository is located at:	Concord Public Library 2900 Salvio Street Concord, CA 94519 Phone number: (925) 646-5455
Current Technical Assistance for Public Participation (TAPP):	N/A
TAPP Title:	N/A
Potential TAPP:	N/A

FIVE-YEAR / PERIODIC REVIEW SUMMARY

Review Summary Table

Status	Start	End
COMPLETE	4/6/2006	10/23/2009
PLANNED	10/1/2017	12/15/2022
COMPLETE	1/1/2015	12/15/2016

ROD/DDs associated with the last Five-Year/Periodic Review

Associated ROD/DD Name	Site WBS	Site Name
FINAL RA PLAN FOR HAZARDOUS SUBSTANCES	0696A.1004	MOTCO-005_Allied Chemical Site B
FINAL RA PLAN FOR HAZARDOUS SUBSTANCES	0696A.1005	MOTCO-006_Coke Pile Site
MOTCO-02, 09 AND 11 RECORD OF DECISION	0696A.1006	MOTCO-009_Froid and Taylor Roads
MOTCO-02, 09 AND 11 RECORD OF DECISION	0696A.1007	MOTCO-011_Wood Hogger Site
FINAL RA PLAN FOR HAZARDOUS SUBSTANCES	0696A.1008	MOTCO-025_K-2 Area
FINAL RA PLAN FOR HAZARDOUS SUBSTANCES	0696A.1009	MOTCO-026_G-1 Area
FINAL RA PLAN FOR HAZARDOUS SUBSTANCES	0696A.1010	MOTCO-028_Litigation Area Monitoring
SITE 31 ROD	0696A.1012	MOTCO-031_Former Fertilizer Plant
MOTCO-032 & 033 RECORD OF DECISION	0696A.1013	MOTCO-032_Unit 7 Mosquito Abatement Ditc
MOTCO-032 -033 AMENDED ROD	0696A.1013	MOTCO-032_Unit 7 Mosquito Abatement Ditc
MOTCO-032 & 033 RECORD OF DECISION	0696A.1014	MOTCO-033_Lost Slough
MOTCO-032 -033 AMENDED ROD	0696A.1014	MOTCO-033_Lost Slough
FINAL RA PLAN FOR HAZARDOUS SUBSTANCES	0696A.1019	MOTCO-004_Allied Chemical Site A
FINAL RA PLAN FOR HAZARDOUS SUBSTANCES	0696A.1020	MOTCO-003_Kiln Site (Litigation Area)

Associated ROD/DD Name	Site WBS	Site Name
LANDFILL REVISED ESD	0696A.1021	MOTCO-001_Tidal Area Landfill
TITLE AREA LANDFILL SITE 1	0696A.1021	MOTCO-001_Tidal Area Landfill
MOTCO-02, 09 AND 11 RECORD OF DECISION	0696A.1022	MOTCO-002_R Area

Results, Actions & Plans

Results	Actions	Plans
The remedy is protective of human health under current land use conditions. Contaminants left in place to avoid impacts to sensitive habitat that supports threatened and endangered species continue to pose low-level risks to ecological receptors.	Survey vegetation impacted by a 2007 wildfire; resume monitoring at former monitoring locations; reassess exposures for the California Black Rail; assess ecological risk in RASS subareas; and evaluate TRVs used in baseline ERA, (see narrative).	15 actions are recommended (see narrative) for immediate, action, were to be completed in 2009, 2010, and 2013.

SITE CLOSEOUT SUMMARY

Site WBS	Site Name	Site Closeout Date
0696A.1011	MOTCO-030_Taylor Blvd Bridge Disposal Si	12/31/2009
0696A.1015	MOTCO-034_Nichols Creek and Erosional Ar	11/30/2008
0696A.1016	MOTCO-035_A16 and E108	3/31/2007
0696A.1017	MOTCO-036_Port Chicago Highway Site	9/30/2014
0696A.1018	MOTCO-037_TT-21 A, B and C	5/31/2012
0696A.1023	MOTCO-026A_G-1 Area Groundwater	10/31/2012
0696A.1026	MOTCO-039_Former Dry Cleaning Facility @	12/31/2013
0696A.1028	MOTCO-007_Legacy Navy site SITE 00007	9/30/2000
0696A.1029	MOTCO-008_Ryer Island	9/30/2000
0696A.1030	MOTCO-010_Legacy Navy site SITE 00010	9/30/2000
0696A.1031	MOTCO-012_Legacy Navy site SITE 00012	9/30/2000
0696A.1032	MOTCO-014_Kinne Boulevard Wells	9/30/2000
0696A.1033	MOTCO-015_Legacy Navy site SITE 00015	9/30/2000
0696A.1034	MOTCO-016_Red Rock Disposal Area	9/30/2000
0696A.1035	MOTCO-017_Bldgs. IA-24 and IA-24A	9/30/2000
0696A.1036	MOTCO-018_Legacy Navy site SITE 00018	9/30/2000
0696A.1037	MOTCO-019_Legacy Navy site SITE 00019	9/30/2000
0696A.1038	MOTCO-020_Legacy Navy site SITE 00020	9/30/2000
0696A.1039	MOTCO-021_Legacy Navy site SITE 00021	9/30/2000
0696A.1040	MOTCO-027_Building 1A-20	9/30/2000
0696A.1041	MOTCO-231_Southern Boundry Ordnance Disp	5/31/1993
0696A.1042	MOTCO-232_Eastern Boundry Ordnance Dispo	9/30/2000
0696A.1043	MOTCO-241_Pistol Range	9/30/2000
0696A.1044	MOTCO-242_Aircraft Range	9/30/2000
0696A.1045	MOTCO-001-R-01_UXO00001	9/15/2004
0696A.1048	MOTCO-246_Building IA-41	9/30/2000
0696A.1056	MOTCO-254_UNOCAL Easement Site	9/30/2000
0696A.1057	MOTCO-255_Building 6LC98	9/30/2000

Site WBS	Site Name	Site Closeout Date
0696A.1058	MOTCO-256_Building 174 Electric Substati	9/30/2000
0696A.1059	MOTCO-257_Q Area Building 350	9/30/2000
0696A.1060	MOTCO-258_Service Station	9/30/2000
0696A.1061	MOTCO-259_Buildings A-3A and E-111	9/30/2001
0696A.1062	PBA@MOTCO_PBA@MOTCO IR Sites	9/30/2015

LAND USE CONTROLS (LUC) SUMMARY

LUC Title	Site
FINAL RA PLAN FOR HAZARDOUS SUBSTANCES	0696A.1004
FINAL RA PLAN FOR HAZARDOUS SUBSTANCES	0696A.1005
FINAL RA PLAN FOR HAZARDOUS SUBSTANCES	0696A.1008
FINAL RA PLAN FOR HAZARDOUS SUBSTANCES	0696A.1009
FINAL RA PLAN FOR HAZARDOUS SUBSTANCES	0696A.1010
FINAL RA PLAN FOR HAZARDOUS SUBSTANCES	0696A.1019
FINAL RA PLAN FOR HAZARDOUS SUBSTANCES	0696A.1020
LANDFILL REVISED ESD	0696A.1021
MOTCO-02, 09 AND 11 RECORD OF DECISION	0696A.1006
MOTCO-02, 09 AND 11 RECORD OF DECISION	0696A.1007
MOTCO-02, 09 AND 11 RECORD OF DECISION	0696A.1022
MOTCO-032 & 033 RECORD OF DECISION	0696A.1013
MOTCO-032 & 033 RECORD OF DECISION	0696A.1014
MOTCO-032 -033 AMENDED ROD	0696A.1013
MOTCO-032 -033 AMENDED ROD	0696A.1014
SITE 31 ROD	0696A.1012
TITLE AREA LANDFILL SITE 1	0696A.1021