FY2012

MOFFETT FIELD USARC

Army Defense Environmental Restoration Program
Installation Action Plan

Table of Contents

Statement Of Purpose	1
Acronyms	2
Installation Information	3
5-Year / Periodic Review Summary	4
Cleanup Program Summary	5
Compliance Restoration	6
CR Summary	7
CR Contamination Assessment	8
CR Previous Studies	9
Compliance Restoration Site Descriptions	10
CCMOF-01 Former Orion Park Housing Area	11
Compliance Restoration Site Closeout (No Further Action) Sites Summary	12
CR Schedule	13
Compliance Restoration Milestones	13
CR Schedule Chart	14

Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multiyear cleanup program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern (AOC), and proposes a comprehensive, installation-wide approach, along with the costs and schedules associated with conducting investigations and taking the necessary remedial actions (RA).

In an effort to coordinate planning information between the restoration manager, the US Army Environmental Command (USAEC), Installation Management Command (IMCOM) - Army Reserve Directorate, the 63rd Regional Support Command (RSC), the executing agencies, regulatory agencies, and the public, an IAP was completed. The IAP is used to track requirements, schedules and tentative budgets for all Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

Acronyms

- AEDB-R Army Environmental Database- Restoration
 - AFRC Armed Forces Reserve Center
 - **CR** Compliance Restoration
 - DD Decision Document
 - FRA Final Remedial Action
 - FY Fiscal Year
- IMCOM Installation Management Command
 - IRA Interim Remedial Action
 - LTM Long-Term Management
 - LUC Land Use Control
- MATES Maneuver Area Training Equipment Site
 - RAB Restoration Advisory Board
 - RC Response Complete
 - RIP Remedy-in-Place
 - ROD Record of Decision
 - TAPP Technical Assistance for Public Participation
 - TRC Technical Review Committee
- USACHPPM US Army Center for Health Promotion and Preventive Medicine
 - USAEC US Army Environmental Command
 - VOC Volatile Organic Compound

Installation Information

Installation Locale

Installation Size (Acreage): 47

City: Mountain View County: San Mateo State: California

Other Locale Information

Orion Park Housing Area (OPHA) in Mountain View, California was part of the Army's former Moffett Community Housing area and was part of the former Naval Air Station Moffett Field, Moffett Field, California. The OPHA site covers approximately 77 acres.

Installation Mission

The installation mission is to serve as the headquarters for the 63rd RSC. The facility includes an Armed Forces Reserve Center (AFRC) and Maneuver Area Training Equipment Site (MATES).

Lead Organization

Lead Executing Agencies for Installation

Army

Regulator Participation

Federal US Environmental Protection Agency (USEPA), Region 9
State California Regional Water Quality Control Board, San Francisco

National Priorities List (NPL) Status

MOFFETT FIELD USARC is not on the NPL

Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status

Installation has no sites in RI phase.

Installation Program Summaries

CR

Primary Contaminants of Concern: Volatiles (VOC)

Affected Media of Concern: Groundwater, Soil

5-Year / Periodic Review Summary

No 5-Year / Periodic Reviews have been scheduled

Cleanup Program Summary

Installation Historic Activity

Prior to 1942, the Army's Orion park Housing Area (OPHA), 47 acres at the Former Moffett Navel Air Station, was used as farmland. The Navy purchased the property and built housing. It was maintained as Navy housing from 1942 until 2009. In 2000 the 47-acre property was transferred to the Army. In 2009 the Navy housing was removed and a new 63rd RSC HQ was built.

There is a regional groundwater plume that passes underneath the Army property. The contamination is coming from an off-location source; however, the USEPA has requested an investigation be completed at Moffett to ensure that no contamination is present at the 47 acres owned by the Army.

A supplemental site investigation (SSI) was completed in FY12 to determine potential chemical releases. No releases have been identified to date. The SI was completed in June 2012.

Installation Program Cleanup Progress

CR

Prior Year Progress: The supplemental site inspection (SSI) was initiated for CCMOF-01 in 2010 and completed in June

2012 with the finalization of SSI report.

Future Plan of Action: The SSI for CCMOF-01 was completed in June 2012 with the finalization of the SSI Report. The

Army anticipates no future action at this site after the SSI Report finalization. USEPA and RWQCB

Agency objections are anticipated with this course of action.

MOFFETT FIELD USARC

Army Defense Environmental Restoration Program Compliance Restoration

CR Summary

FΥ

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 1/0

Installation Site Types with Future and/or Underway Phases

1 Contaminated Ground Water

(CCMOF-01)

Most Widespread Contaminants of Concern

Volatiles (VOC)

Media of Concern

Groundwater, Soil

Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID Site Name Action Remedy

N/A

Duration of CR

Date of CR Inception: 199210

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201309/201309

Date of CR completion including Long Term Management (LTM): 201309

CR Contamination Assessment

Contamination Assessment Overview

Groundwater in OPHA is contaminated with chlorinated solvents (e.g., trichloroethylene (TCE) and degradation products). The Navy had conducted a series of investigations at OPHA to evaluate possible sources of chlorinated solvents, primarily trichloroethylene (TCE), in groundwater. In August 2006, the Navy submitted a Draft Groundwater Monitoring Well Installation and Sampling Report for OPHA to the Region 9 EPA. After review, the USEPA commented that there is sufficient information to indicate potential on-site source areas. EPA's comments identified three groups: Group 1 included data reflecting possible onsite sources; Group 2 included areas of the site where data suggests that off-site sources of contamination were migrating onto the OPHA property; Group 3 areas were defined as areas where existing data suggests possible on-site and off-site sources are commingled. The Navy finalized the report in September 2007 concluding that the TCE and cis-1,2-dichloroethene (DCE) originates off-site and upgradient to OPHA and that there are no identified on-site TCE sources. The regulatory agency continues to believe that existing data indicates possible on-site sources.

The Army, USEPA and adjacent land owners have supplemented the general understanding of contamination in the vicinity of the OPHA by conducting additional sampling. Based on the available characterization data, the presence or absence of on-site TCE source areas has remained an unresolved issue at the OPHA. USEPA acknowledges that there are upgradient sources where TCE is migrating onto OPHA; however, they still believe there are possible on-site sources or on-site sources which might be commingled with off-site sources that are contributing to the groundwater contamination in the study area. Therefore, an additional investigation was undertaken in 2010 to determine if an on-site or commingled on-site source exists. The Army worked closely with the USEPA to develop the scope of work and carefully select the sample locations. The results from the 2010-2011 field investigation have shown that there appear to be no on-site or commingled on-site sources at OPHA, thus confirming the Navy's previous conclusions. The site investigation report from the 2010-2011 field investigation was completed in June 2012. The Army is proposing no further action at this site.

Cleanup Exit Strategy

The site investigation report from the 2010-2011 field investigation was completed in June 2012. The Army is proposing no further action at this site.

CR Previous Studies

	Title	Author	Date		
1999					
	TCE study in groundwater at the downgradient boundary of the Site	Science Applications International Corporation [SAIC] 1999	SEP-1999		
2000					
	Navy - Groundwater sampling based on the information provided by NASA in 1999	International Technology Corporation [IT]	SEP-2000		
2003		· · · · · · · · · · · · · · · · · · ·			
	Army - Investigation of groundwater south (upgradient) and west of the Site	The SI Group	SEP-2003		
	Navy - Phase 1 and 2 investigations to characterize the Site and to conduct a baseline risk assessment	FWENC	SEP-2003		
2005					
	EPA - Investigation of groundwater south (upgradient) of the Site	EPA	SEP-2005		
2007					
	Navy - Groundwater monitoring well installation and sampling	Tetra Tech EC	SEP-2007		
2009					
	USACHPPM - Geophysical survey, MIP investigation, and subsurface soil sampling of the former septic tank and drain field	USACHPPM	SEP-2009		

MOFFETT FIELD USARC

Compliance RestorationSite Descriptions

Site ID: CCMOF-01 Site Name: Former Orion Park Housing Area



Regulatory Driver: CERCLA

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Groundwater, Soil

RIP Date: N/A RC Date: 201309

SITE DESCRIPTION

Orion Park Housing Area (OPHA) in Mountain View, California was part of the Army's former Moffett Community Housing area and was part of the former Naval Air Station Moffett Field, Moffett Field, California. The Navy transferred the OPHA to the Air Force in 1994. Then OPHA was subsequently transferred to the Army in July 2000. The OPHA site covers approximately 77 acres. Pursuant to the Base Realignment and Closure (BRAC) 2005 recommendations, the US Army Reserves had demolished the existing housing units and associated structures over a 30-acre area in the northern part of the OPHA site to construct a new Armed Forces Reserve Center (63 RSC) and associated support facilities.

Groundwater in OPHA is contaminated with chlorinated solvents (e.g., trichloroethylene (TCE) and degradation products). The Navy had conducted a series of investigations at OPHA to evaluate possible sources of chlorinated solvents, primarily trichloroethylene (TCE), in groundwater. In August 2006, the Navy submitted a Draft Groundwater Monitoring Well Installation and Sampling Report for OPHA to the Region 9 EPA. After review, the USEPA commented that there is sufficient information to indicate potential on-site source areas. EPA's comments identified three groups: Group 1 included data reflecting possible onsite sources; Group 2 included areas of the site where data suggests that off-site sources of contamination were migrating onto the OPHA property; Group 3 areas were defined as areas where existing data suggests possible on-site and off-site sources are commingled. The Navy finalized the report in September 2007 concluding that the TCE and cis-1,2-dichloroethene (DCE) originates off-site and upgradient to OPHA and that there are no identified on-site TCE sources. The regulatory agency continues to believe that existing data indicates possible on-site sources.

The Army, USEPA and adjacent land owners have supplemented the general understanding of contamination in the vicinity of the OPHA by conducting additional sampling. Based on the available characterization data, the presence or absence of on-site TCE source areas has remained an unresolved issue at the OPHA. USEPA acknowledges that there are upgradient sources where TCE is migrating onto OPHA; however, they still believe there are possible on-site sources or on-site sources which might be commingled with off-site sources that are contributing to the groundwater contamination in the study area. Therefore, an additional investigation was undertaken in 2010 to determine if an on-site or commingled on-site source exists. The Army worked closely with the USEPA to develop the scope of work and carefully select the sample locations. The results from the 2010-2011 field investigation have shown that there appear to be no on-site or commingled on-site sources at OPHA, thus confirming the Navy's previous conclusions. The Army is in the process of finalizing the supplemental site investigation report from the 2010-2011 field investigation. The Army is proposing no further action at this site.

CLEANUP/EXIT STRATEGY

The Army is in the process of finalizing the supplemental site investigation report from the 2010-2011 field investigation. The Army is proposing no further action at this site.

Site Closeout (No Further Action) Summary

NFA Date Site ID Site Name **Documentation**

There are no NFA sites

CR Schedule

Date of CR Inception: 199210

Past Phase Completion Milestones

1993

PA (CCMOF-01 - Former Orion Park Housing Area)

Projected Phase Completion Milestones

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

To Be Determined

Final RA(C) Completion Date:

Schedule for Next Five-Year Review: N/A

Estimated Completion Date of CR at Installation (including LTM phase): 201309

MOFFETT FIELD USARC CR Schedule

					= phase underway			
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
CCMOF-01	Former Orion Park Housing Area	SI						

Community Involvement

Technical Review Committee (TRC): None

Community Involvement Plan (Date Published): TBD

Restoration Advisory Board (RAB): No

Reason Not Established: Installation has no sites in RI phase.

Additional Community Involvement Information

A Navy RAB exists for Moffett Field. The Army attends periodically to update the RAB on the Moffett Orion Park site. As such, no RAB has been initiated for Moffett. The site is in the SI phase at this time.

Administrative Record is located at

An administrative record has not yet been established. The site is within the SI phase.

Information Repository is located at

An information repository has not yet been established. The site is within the SI phase.

Current Technical Assistance for Public Participation (TAPP):N/A

TAPP Title: N/A

Potential TAPP: N/A