MATHER AFB
CALIFORNIA

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 3237

Mather Air Force Base

Final

Finding of Suitability to Transfer

Parcels A-1, P-1, and P-2

January 2012

Air Force Real Property Agency

Table of Contents

1.0 PURPOSE 1
2.0 PROPERTY DESCRIPTION 4
3.0 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE 13
4.0 ENVIRONMENTAL CONDITION OF THE PROPERTY 13
5.0 DEED RESTRICTIONS AND NOTIFICATIONS 15
5.1 Hazardous Substances Notification 16
5.2 Installation Restoration Program Sites and Institutional Controls 16
5.2.1 Installation Restoration Program (IRP) Sites 16
5.2.2 Institutional Controls for IRP Sites on, and Groundwater Contamination Underlying or Near Parcels A-, P-1, and P-2 37
5.3 Petroleum Products and Derivatives 45
5.4 Underground/Aboveground Storage Tanks 45
5.5 Oil/Water Separators 54
5.6 Military Munitions 55
5.7 Radioactive and Mixed Waste 57
5.8 Asbestos-Containing Material 58
5.9 Lead-Based Paint – Facilities Other Than Housing 59
5.10 Lead-Based Paint & Lead Based Paint Containing Materials & Debris 59
5.11 Sanitary Sewer Systems (Wastewater) 59
5.12 Drinking Water Quality 60
5.13 Indoor Air Quality (Soil Vapor Intrusion) 61
5.14 Air Permits 61
5.15 Floodplains 61
5.16 Biological Resources 61
6.0 STATE LAND USE COVENANT 63
7.0 REGULATOR COORDINATION 63
8.0 PUBLIC NOTICE 64
9.0 FINDING OF SUITABILITY TO TRANSFER 65

List of Tables

Table 2.0 Property Inventory Description 4
Table 2.1 Demolished Facilities 11
Table 5.2A IRP Sites with Ongoing Final Remedies in Place 18
Table 5.2B Closed IRP Sites Requiring 24
Table 5.2C Groundwater Wells Located on Parcel A-1 29
Table 5.2D Vapor Wells located on Parcel A-1 32
Table 5.2E Vapor Wells located on Parcel P-2 37
Table 5.4A Former USTs Located on Parcels A-1, P-1 and P-2 46
Table 5.4B ASTs Located, or Formerly Located, on Parcels A-1, P-1 and P-2 51
Table 5.5 Status Summary of Oil/Water Separators 54

List of Attachments

Attachment 1 - Property Map(s) 66
Attachment 2 - Environmental Factors Table 70
Attachment 3 - Notice of Hazardous Substances Stored 71
Attachment 4 - Notice of Hazardous Substances Released 74
Attachment 5 - MMRP Site XU403, Practice Bomb Range Documentation 92
Attachment 6 - Regulator and Public Comments 118
Attachment 7 - AFRPA Responses to Regulator and Public Comments 133
Attachment 8 - FOST Concurrence Related Correspondence 147
Attachment 9 - FOST Related Notices and Correspondence 148

Acronyms and Abbreviations

1,1-DCE	1,2-dichloroethene
1,2-DCA	1,2-dichloroethane
1,2-DCP	1,2-dichloropropane
ACM	asbestos-containing material
AF	Air Force
AFB	Air Force Base
AFBCA	Air Force Base Conversion Agency
AFRPA	Air Force Real Property Agency
AFSC	Air Force Safety Center
AOC	Area of Concern
AR	Administrative Record
AST	aboveground storage tank
ATC	Air Training Command
AVGAS	aviation gasoline
bgs	below ground surface
Bldg	building
CA	California
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR	Code of Federal Regulations
CIWMB	California Integrated Waste Management Board
cis-1,2-DCE	cis-1,2-dichloroethene
COC	contaminant of concern
CVWB	State of California Central Valley Regional Water Quality Control Board
DAA	Deputy Assistant Administrator
DAS	Deputy Assistant Secretary
DDESB	Department of Defense Explosives Safety Board
DoD	Department of Defense
DMM	discarded military munitions
DTSC	California Department of Toxic Substances Control
EBS	environmental baseline survey
ECC	Environmental Condition Category
EC-CR	Environmental Compliance-Closure Related
EIR	environmental impact report
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act

ESD	explanation of significant differences
ESOH	Environment, Safety, and Occupational Health
ESS	explosives safety submission
FEIS	final environmental impact statement
FOSL	finding of suitability to lease
FOST	finding of suitability to transfer
FOSET	finding of suitability for early transfer
FSROD	fourth supplemental record of decision
ft	foot/feet
Gal	gallons
gpm	gallons per minute
GW	groundwater
HM	hazardous material
HSU	hydrostratigraphic unit
IC	institutional controls
IRCTS	Inactive Rancho Cordova Test Site
IRP	Installation Restoration Program
JP-4	jet propulsion fuel, type 4
kg	kilogram
LBP	lead-based paint
lbs	pounds
LUC	land use restrictions
MAFB	Mather Air Force Base
Mather	former Mather Air Force Base
MB/SAC	Main Base/Strategic Air Command Area Plume
MC	munitions constituents
MCL	maximum contaminant level
MEC	munitions and explosives of concern
mg/kg	milligram(s) per kilogram
MMRP	Military Munitions Response Program
MOGAS	motor gasoline
MRS	munitions response site
NAD	North American Datum
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NDAI	no Department of Defense action indicated
NEPA	National Environmental Policy Act

NFA	no further action
Ops	Operations
OPS	operating properly and successfully
OU	Operable Unit
OWS	oil water separator
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PCE	perchloroethene
ppbv	part(s) per billion by volume
PZ-	piezometer
RAO	removal action objective
RAR	Remedial Action Report
RCRA	Resource Conservation and Recovery Act
ROD	record of decision
RSOD	revised supplemental record of decision
RW	radioactive waste
S&GW	soil and groundwater
SCEMD	Sacramento County Environmental Management Department
SEBS	supplemental environmental baseline study
SLUC	state land use covenant
SROD	supplemental record of decision
SVE	soil vapor extraction
TACAN	tactical air navigation system
TBD	to be determined
TCE	trichloroethene or trichloroethylene
TSROD	third supplemental record of decision
USACE	United States Army Corps of Engineers
USAF	United State Air Force
USEPA	United States Environmental Protection Agency, Region IX
µg/L	micrograms per liter
UST	underground storage tank
VOC	volatile organic compound
VSI	visual site inspection
UNK	unknown
USFWS	United States Fish and Wildlife Service
UXO	unexploded ordnance

FINDING OF SUITABILITY TO TRANSFER (FOST)
MATHER AIR FORCE BASE, CALIFORNIA
PARCELS A-1, P-1 and P-2
DRAFT FINAL

1.0 PURPOSE

1.1 The purpose of this Finding of Suitability to Transfer (FOST) is to document environmentally related factors and the suitability to transfer the real property and improvements on Parcels A-1, P-1 and P-2 (herein referred to as the "Property") at the former Mather Air Force Base (Mather), California (CA) to Sacramento County (herein referred to as the "Transferee"). A description of the subject Property is provided in Section 2 below. The Property will be transferred in sections by deed through different mechanisms. Approximately 2,040 acres will transferred by Deed via public benefit conveyance (Parcel A-1); approximately 6 acres will transferred by Deed via educational public benefit conveyance (Parcel P-1); and approximately 1.7 acres will transferred by Deed via educational public benefit conveyance (Parcel P-2), for a total of about 2,048 acres. The County plans to reuse and develop the Property for operation of an airfield, aviation support, light industrial, educational, and commercial use, in accordance with the *Draft Mather Airport Master Plan*, dated December 2003, and with the *Final Environmental Impact Study (EIS) for the Disposal and Reuse of Mather AFB*, dated April 1992.

1.2 This FOST is a result of a thorough analysis of information contained in the following documents:

1) *Final Mather Asbestos Survey Report by Pickering Environmental*, September15, 1990;
2) *Final Environmental Impact Statement (EIS) for the Disposal and Reuse of Mather AFB,* April 1992 (Administrative Record [AR] #1831);
3) *EIS Record of Decision (ROD) for the Disposal and Reuse of Mather AFB*, March 1993 (AR #2164);
4) *Basewide Environmental Baseline Survey (EBS),* December 1993 (AR #955);
5) *Final ROD for Aircraft Control and Warning Site, Mather AFB*, December 1993 (AR #602);
6) *Mather Field General Plan Amendment*, adopted August 1994;
7) *Mather Field General Plan Amendment Final Environmental Impact Report (EIR),* State Clearinghouse No. 1993102054, August 1994;
8) *Mather Air Force Base Redevelopment Plan Final Subsequent EIR,* State Clearinghouse No. 1993032006, September 1994;
9) *Supplemental ROD (SROD) for the Disposal and Reuse of Mather AFB,* September 1994 (AR #2165);
10) *Final Groundwater Operable Unit (OU) and Soil OU Focused Feasibility Study Report for Mather AFB, CA,* March 27, 1995 (Vol. I, Vol. II, Vol. III, and Vol. IV) (AR #766; 898-900);
11) *Final ROD for the Landfill Operable Unit Sites for Mather AFB, CA,* July 1995 (AR #844);
12) *Revised Supplemental Record of Decision (RSROD) of the EIS for the Disposal and Reuse of Mather AFB,* September 1995 (AR #2166);

13) *Final ROD for the Soil OU Sites and Groundwater OU Plumes, Mather AFB,* April 29, 1996 (AR #799);
14) *Final Comprehensive Baseline Risk Assessment for Mather AFB,* October 17, 1996 (AR #626-628);
15) *Mather Field Specific Plan Final Subsequent EIR,* State Clearinghouse No.1996052108, February 1997;
16) *Mather Field Specific Plan*, adopted May 7, 1997;
17) *Mather Field Special Planning Area Ordinance*, adopted June 11, 1997;
18) *Mather Field Bombing Range Activities,* April 1998 (AR #1723);
19) *Third Supplemental Record of Decision (TSROD) of the EIS for the Disposal and Reuse of Mather AFB,* May 1998 (AR #2167);
20) *Basewide OU Record of Decision,* August 1998 (AR #1135);
21) *Aerojet-General Technical Memorandum: Evaluation of Perchlorate in Groundwater Aerojet Site Study Areas*, August 1998;
22) *Finding of Suitability for Early Transfer (FOSET) and Supplemental Environmental Baseline Survey for Parcels C-2, C-3, C-4, C-5, C-6, C-9, I, M, P, Q, Ut, and Uw*, December 1998;
23) *Explanation of Significant Differences (ESD) Soil Operable Unit Sites and Groundwater Operable Unit Plumes Record of Decision for Sites 56, 59, 60*, December 1998 (AR #2636);
24) *Abandonment of Septic Tanks, Mather AFB, CA*, Montgomery Watson, May 2000***;**
25) *Draft Mather Airport Master Plan,* dated December 2003;
26) *Natural Resources Assessment* Report, Wetlands Research Associates, 2004;
27) *Delineation of Potential Jurisdictional Wetlands and Waters of the U.S. for the Mather Field Study area in Rancho Cordova*, Wetlands Research Associates, 2004;
28) *Final Second Five-Year Review of Remedial Actions Conducted Under CERCLA for the Mather IRP Program*, September 24, 2004 (AR #2157);
29) *Final CERCLA ROD for the Supplemental Basewide OU Sites, Mather AFB,*September 30, 2006 (AR #2646);
30) *Final Capture Zone Analysis Report for the Main Base/SAC Area Plume at Mather*, MWH, August 2007 (AR# 2703 and 2703.1);
31) *Closure of Military Munitions Response Program (MMRP) Site 0T089. Old Trap Range at the Former Mather Air Force Base. California*, February 2008 (AR #2704);
32) *Fourth Supplemental Record of Decision (FSROD) of the EIS for the Disposal and Reuse of Mather AFB,* March 2008;
33) *Basewide OU, Final Explanation of Significant Difference From the Record of Decision, Excavation of Shallow Soil Contaminated with Lead at Site 10C/68*, June 2008 (AR #2709);
34) *Closure of MMRP Site AOC 596, Small Arms Firing Range at the Former Mather Air Force Base. California*, October 2008 (AR #2715);
35) *Mather AFB Off-Base Water Supply Contingency Plan Final, Revision 1*, November 17, 2008 (AR# 2718);
36) *Final Memorandum of Post-ROD Changes, Clarification of Institutional Controls for* the *Landfill Operable Unit Remedies, Mather, California*, October 15, 2008, Revised August 5, 2009 (AR # 2738);

37) *Final Capture-Zone Analysis Report for the Southwest Lobe of the Main Base/SAC Area Plume, former Mather Air Force Base, California*, MWH, November, 2009 (AR# 2738);
38) *No Further Action (NFA) Explosives Safety Submission (ESS) for Practice Bomb Range Site XU403, Former Mather Air Force Base (AFB),* November 13, 2009 (AR #2754);
39) *Air Force Safety Center Transmittal of Former Mather AFB, CA, No DoD Action Indicated (NDAI) Explosives Safety Submission (ESS) for Munitions Response Site (MRS) XU403, Practice Bomb Range*, November 19, 2009 (AR #2976);
40) *Approval of NDAI ESS for Practice Bomb Range Site XU403 by Department of Defense Explosives Safety Board (DDESB),* December 9, 2009 (AR # 2978);
41) *Final Annual and Fourth Quarter 2008 Mather Groundwater Monitoring Report for the former Mather Air Force Base (Mather), California*, MWH, December 2009 (AR# 2777);
42) *2009 Soil Vapor Extraction/Bioventing Annual Monitoring Report, Sites 7, 11, 23C, 29/71, 37/39/54, 57 and 59,* February 2010 (AR #2783);
43) Revised Final *Explanation of Significant Difference from the Record of Decision for Soil Operable Unit Sites and Groundwater Operable Unit Plumes, Soil Sites WP-07/FT-11, ST-37/ST-39/SS-54, SD-57, SD-59, Main Base/SAC Area Plume, Site 7 Plume, Northeast Plume, Mather, California*, February, 2010 (AR #2972);
44) *2009 Annual Groundwater Monitoring Report, Inactive Rancho Cordova Test Site, Rancho Cordova, California; Groundwater Monitoring and Reporting Program. CVWB Order No. R5-2008-830I,* Montgomery and Associates, April 2010, prepared for The Boeing Company and Aerojet-General Corporation (not in the Mather AR, but may be viewed at: http://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2665399134/SL205493018.PDF);
45) *Presence of MMRP Site XU403, Practice Bomb Range at the former Mather Air Force Base.* Letter transmittal from Philip Mook, AFRPA to Robert Leonard, County of Sacramento, May 3, 2010 (AR# 2977);
46) *Site 10C/68 Closure Report, Former Mather Air Force Base, Sacramento County, California*, MWH, May 2010 (AR #3042);
47) *Final Site 18 and 23A Closure Report, Former Mather Air Force Base, Sacramento County, California*, MWH, May 2010 (AR #3037);
48) *Final Explanation of Significant Difference from the Record of Decision for Basewide Operable Unit Sites, Sites FT-10C/ST-68, LF-18, OT-23C, and OT-87, Mather, California,* June, 2010 (AR # 2971);
49) *Final 2009 Groundwater Monitoring Program Evaluation Report, Mather AFB,* June 2010;
50) *Closure of MMRP Site XU403, Practice Bomb Range at the Former Mather Air Force Base*, July 16, 2010 (AR # 2979);
51) *Annual 2009 Mather Groundwater Monitoring Report*, October 2010 (AR #2970-2970.1);
52) *Final Third Five-Year Review Report for Mather AFB,* October 2010 (AR #3039)
53) *Revised Final Report of Proper and Successful Operation for the Northeast Plume Groundwater Remedial Action*, AFRPA, March, 2011 (AR# 2996);
54) *Final Remedial Action Report for Installation Restoration Program Site ST-20 Sewage Treatment Plant UST and Sludge Drying Beds at the Former Mather AFB, California,* AFRPA, March 2011 (AR# 2994);
55) *Demonstration of Groundwater Operable Unit Remedial Action Operating Properly and Successfully, Main Base/SAC Area Groundwater Plume, Former Mather Air Force Base, Sacramento County, California,* AFRPA, March 2011 (AR #3062);
56) Visual Site Inspection (VSI) conducted in April 2011 (Attachment 7 of the SEBS);

57) *Draft Supplemental Environmental Baseline Survey, Former Mather Air Force Base, California, Parcels A-1, P-1 and P-2*, May 2011 (AR #3043);
58) *Draft Supplemental Environmental Baseline Survey, Former Mather Air Force Base, California, Parcels A-1, P-1 and P-2*, May 2011;
59) *Demonstration of Groundwater Operable Unit Remedial Action Operating Properly and Successfully (OPS), Site 7 Groundwater Plume, Former Mather Air Force Base, Sacramento County, California, AFRPA*, May 2011(AR#3055);
60) USEPA*;* memorandum, "*Re: Request For EPA Determination of Air Force Compliance With CERCLA Section 120(H)(3) for Soil And Groundwater Remedial Actions, Mather Air Force Base, California*, July 14, 2011 (AR# 3058);
61) *Draft Biological Opinion For Disposal Of The Former Mather Air Force Base, Sacramento County, California*, January 2010 (U.S. Fish And Wildlife Service file number 81420-2008-TA-1567-1)

Note: Documents that do not list an AR number are currently not scanned into the online AR File at the time the FOST was prepared; however, these documents maybe reviewed at the AFRPA Western Regional Execution Center at 3411 Olson Street, McClellan, CA 95652 (call 916 643-6420 x201 to make an appointment). Documents with AR File numbers are located at the following website address: https://afrpaar.lackland.af.mil/ar/.

2.0 PROPERTY DESCRIPTION

The Property is shown on the map in Attachment 1**,** Figure 1, and is comprised of approximately 2,048 acres. The basewide Environmental Baseline Survey (EBS) identified approximately 173 mixed-use facilities located within the boundaries of the Property, of which 46 have since been demolished, 14 are in the process of being demolished in late 2011 and early 2012. The remaining facilities in Table 2.0 are proposed for transfer, subject to any additional demolition requested by Sacramento County and approved by the Air Force under the current lease. A listing of facilities located on the Property is provided in Tables 2.0a, 2.0b, 2.0c, and demolished properties in Table 2.1. Photographs of the Property can be found in the Visual Site Inspection (VSI) report in Attachment 7 of the Supplemental Environmental Baseline Survey (SEBS).

Table 2.0
Property Inventory Description

Table 2.0a: Facilities in Parcel A-1

Bldg.	Original Purpose	Area (ft^2)	HM[1]	Tanks[2]	ACM[3]	LBP[4]	Age
3382	Material Services	11,334	Yes		Yes	Yes	1942
3385	Storage (used for hazardous materials and waste)	1,648	Yes		No	No	1984
3395	Storage (Hazardous Waste	400	Yes		No	No	1989

Table 2.0a: Facilities in Parcel A-1							
Bldg.	**Original Purpose**	**Area (ft^2)**	**HM[1]**	**Tanks[2]**	**ACM[3]**	**LBP[4]**	**Age**
	Accumulation Point)						
3398	Storage (Hazardous Waste Storage)	916	Yes		No	No	1983
3492	Office	7,109			No	No	1984
4000	Liquid Fuel Pump Station	96	Yes		No	Yes	1945
4001	Liquid Fuel Transfer Station		Yes		No	Unk.	Unk.
4003	Liquid Fuel Pump Station	669	Yes		No	Yes	1945
4005	JP-4 Tank	20K BBL	Yes	1-AST	No	Yes	1958
4012	Petrol Ops Bldg.	300	Yes		No	Yes	1961
4015	Liquid Fuel Pump Station	669			No	Yes	1945
4018	Eye Wash/Shower	24			No	Yes	1970
4020	JP-4 Tank	10K BBL	Yes	1-AST	No	Yes	1958
4022	Liquid Fuel Stand	8			No	Yes	1945
4023	Liquid Fuel Stand	2			No	Yes	1945
4025	Operations Booth	27			No	No	1988
4130	Engine Test Cell	869	Yes	1-AST	Unk.	Yes	1977
4140	Deluge System (Fire Suppression) Water Storage	Unk.		1-AST	No	Yes	1956
4145	Fire Pump Station	1,635	Fuel	4-AST/ UST	Yes	Yes	1956
4147	Hazardous Storage	244	Yes		No	No	1985
4150*	General Purpose Aircraft Shop (former plating shop)	29,796	Yes		Yes	Yes	1963
4200	Supply Warehouse	92,565			Yes	Yes	1953
4201	Storage Shed	822			No	No	1980
4205	Office	880			No	Yes	1942

Table 2.0a: Facilities in Parcel A-1							
Bldg.	**Original Purpose**	**Area (ft^2)**	**HM[1]**	**Tanks[2]**	**ACM[3]**	**LBP[4]**	**Age**
4213	Storage Shed	544					1984
4215	Storage Shed	2,150			Yes	Yes	1971
4216	Cylinder Shed	105			No	No	1980
4217	Cylinder Shed	824			No	No	1980
4218*	Cylinder Shed	822			No	No	1980
4225	Hazardous Storage	815	Yes		No	Yes	1976
4238	Open-sided storage shed	532					1982
4248*	Heating Facility	375			No	No	1988
4249	Compressed Air Plant	105		1-AST	No	Yes	1953
4250	Aircraft Washrack	2670					1953
4260	Maintenance Hangar	97,413	Yes		Yes	Yes	1956
4290	Loading Ramp	896					1990
4301	Shop	820			No	No	1986
4302	Shop	10,967	Yes		Yes	Yes	1942
4303	Equipment Pad	820	Yes				1896
4304	Hazardous Storage	220	Yes		No	No	1985
4373	Hazardous Storage	195			No	No	1985
4376	Aircraft Maintenance	28,619	Yes		Yes	Yes	1941
4442	Commissary Storage	6,847			Unk.	Yes	1970
4468	Storage/Shop (now Office)	1,354	Yes		Yes	Yes	1942
4470	Liquid Oxygen Storage	125			No	Yes	1977
4475	Storage/Shop	12,500	Yes		No	No	1987
4642	Office	8,197			Yes	Yes	1975
4644	Ammunitions Vault	817			No	Yes	1942

Table 2.0a: Facilities in Parcel A-1							
Bldg.	**Original Purpose**	**Area (ft^2)**	**HM[1]**	**Tanks[2]**	**ACM[3]**	**LBP[4]**	**Age**
4654	Small Arms Shop	235			No	Yes	1947
4677	Hangar/Warehouse	50,404			Yes	Yes	1945
6905	Waste Collection Sump (for 7005)	Unk.	Yes	1-OWS	No	No	1980
7000	Base Warehouse	50,919			Yes	Yes	1959
7001	Storage	4,846	Yes		Yes	Yes	1961
7002	Air Compressor Plant	144			Unk.	Yes	1962
7005	Fuel Maintenance Dock (Hangar)	17,000			Yes	Yes	1963
7006	Sewage Pump Station	16			Unk.	Yes	1962
7007	Electric Power Station	173		2 - AST		No	1985
7009	Storage Warehouse	33,049	Yes		Yes	Yes	1961
7010	Maintenance Hangar	16,020	Yes		Yes	Yes	1961
7011	Liquid Oxygen Storage	1,584			Unk.	Yes	1963
7013	Office	11,857			Yes	No	1979
7014	Training Facility	19,317			No	No	1979
7015	Maintenance Hangar	26,245	Yes	2-AST	Yes	Yes	1959
7016[5]	Hazardous Storage	305	Yes		Unk.	No	1984
7017	Training Facility Storage	100			No	No	1988
7020*	Avionics Shop	23,883	Yes		Yes	Yes	1958
7022	Aerospace Ground Equipment Shop	7,494	Yes		Yes	Yes	1962
7023	Vehicle Washrack	676			No	No	1983
7024	Engine Maintenance Shop	20,813	Yes	1-OWS	Yes	Yes	1962
7025	Office	12,342			Yes	Yes	1959
7026[5]	Hazardous Storage	350	Yes		No	No	1984
7028	Storage	1,530			Yes	No	1985

Table 2.0a: Facilities in Parcel A-1							
Bldg.	**Original Purpose**	**Area (ft^2)**	**HM[1]**	**Tanks[2]**	**ACM[3]**	**LBP[4]**	**Age**
7029	Softball backstop fence	NA			No	No	Unk
7031[5]*	Hazardous Storage	171	Yes		No	No	1985
7033	Aerospace Ground Equipment Shop	12,241	Yes		Yes	Yes	1978
7034*	Latrine	133			No	Yes	1959
7035*	Corrosion Control Hangar	21,586	Yes	1-AST	Yes	Yes	1959
7036*	Electric Utility Substation	350			Unk.	Unk.	1959.
7037	Explosive storage	100			No	Yes	1972
7038*	Oil/Water Separator at 7035	Unk.	Yes	1-OWS	No	Yes	1971
7039	Oil Skimmer	Unk.	Yes	1-OWS 1-UST	No	Yes	1969
7040	Maintenance Hangar	26,819	Yes	1 - AST	Yes	Yes	1959
7041*	Paint Shop	1,500	Yes		No	No	1980
7043*	Office/ Shop	1,038			No	No	1986
7045*	Aircraft Maintenance Shop	31,142	Yes	1-AST	Yes	Yes	1958
7046	Covered Storage	900			No	No	1988
7057	Liquid Oxygen Storage	207					1977
7063	Consolidated Tool Kit (Aircraft Maintenance)	720					1989
7065*	Office/Shop	1,024			Yes	Yes	1974
7066*	Storage	192			Yes		1981
7068*	Storage	107			Unk.		1965
7070	Fire Equipment Storage	1,075			Yes	Yes	1977
7075	Fire Station	19,277	Yes	2-AST	Yes	Yes	1958
7079	Entry Control Bldg.	89			No	No	1983
7085	Fire Dept. Storage	1,395	Yes	1-AST	No	Yes	1977
7098	Water Supply Bldg.	195			No	Yes	1961
7100	Oil-Water Skimmer	NA			No	No	1977
7113	Trickle Filter	NA					Unk.

Table 2.0a: Facilities in Parcel A-1							
Bldg.	**Original Purpose**	**Area (ft^2)**	**HM[1]**	**Tanks[2]**	**ACM[3]**	**LBP[4]**	**Age**
7123	Sewage Plant Clarifier	NA					Unk.
7124	Sewage Plant Clarifier	NA					Unk.
7125	Sewage Pump Station	75	Fuel	1-AST			1959
7126	Waste Treatment Bldg.	98					1987
7130	Sewage Pump Station	105					1982
7133	Sewage Plant Bldg.	223					1941
7143	Sewage Plant Clarifier	NA					Unk.
7144	Sewage Plant Clarifier	NA					Unk.
7145	Waste Treatment Building	18			Unk.	Yes	1945
7153	Sewage Trickle Filter	NA					Unk.
7300	Fire Training Facility	130,680	Fuel	2-AST	No	No	1963
7310	Fire Training Oil Water Separator (OWS)	Unk.		OWS	No	No	1985.
7310B	Fire Training Oil Water Separator (OWS)	Unk.		OWS	No	No	Unk.
7950	Park	NA			No	No	Unk.
7963	Gazebo	Unk.					Unk.
7965	Latrine	459			No	No	1981
8125	Baseball Backstop	NA			No	No	Unk.
8150	Readiness Crew	20,480	Fuel	1-AST	Yes	Yes	1960
8151	Electric Power Station	198			No	No	1986
8152	Guard Tower	132			No	No	1979
8157	Electric Power Station	1,669			No	No	1980
8158	Readiness Crew	1,842	Fuel	1-AST	Yes	No	1980
8195	Storage Magazine	189			Unk.	Yes	1958
10015	Electric Power	196	Fuel	2-AST	Unk.	No	1979

Table 2.0a: Facilities in Parcel A-1							
Bldg.	**Original Purpose**	**Area (ft^2)**	**HM[1]**	**Tanks[2]**	**ACM[3]**	**LBP[4]**	**Age**
	Station						
10025	Airfield Equipment	96			No	Yes	1956
10030	Utility Vault	195	Yes	1-AST	No	Yes	1956
10063	Control Tower	5,418		1-AST			1985
10065	Utility Vault	1,358	Fuel	2-AST	Unk.	Yes	1958
10069	Electric Power Station	160			Unk.	No	1966
10072	Electric Power Station	195	Fuel	1-AST	Unk.	Yes	1956
10074	Airfield Equipment	97			Yes	Yes	1956
10081	Electrical Substation				No	No	Unk.
10085	Electric Power Station	192	Fuel	2-AST	Unk.	No	1979
10088	ILS Localizer	NA				No	1980
10099	Ceilometer-2	NA				No	1963

Notes:
UNK - unknown

[1] HM - Hazardous material was known to have been stored in this facility.

[2] Tanks - Tanks were associated with the facility (e.g., OWS – oil-water separator, AST - aboveground storage tank or UST - underground storage tank).

[3] ACM - Asbestos-containing materials were used in the construction of this facility.

[4] LBP - Lead-based paint may have been used within this facility due to its date of construction (i.e., before 1978).

[5] These facilities were hazardous waste accumulation points under the Mather (Resource Conservation and Recovery Act) RCRA permit.

*The fourteen asterisked facilities were approved by the Air Force in 2011 for demolished by Sacramento County

**Facility 7067 is about 10 by 100 feet; the area in the table is incorrect

Table 2.0b: Facilities in Parcel P-1

Bldg.	**Original Purpose**	**Area (ft^2)**	**HM[1]**	**Tanks[2]**	**ACM[3]**	**LBP[4]**	**Age**
7049	OWS	NA	Waste oil	1-OWS	No	No	1987 or 1988
7051	Truck Maintenance	6,399	Yes	600-gallon AST	No	No	1987
7052	Vehicle Maintenance Shop	30,821	Yes	100-gallon and 1000-gallon AST	No	No	1987

Bldg.	Original Purpose	Area (ft^2)	HM[1]	Tanks[2]	ACM[3]	LBP[4]	Age
7053	Administrative	5,354	<1000 kg		No	No	1987
7054	Vehicle Wash Rack	1,675	Waste oil	1-OWS	Yes	No	1990

Notes:
[1] HM - Hazardous material was known to have been stored in this facility.
[2] Tanks - Tanks were associated with the facility (e.g., AST - aboveground storage tank or UST - underground storage tank).
[3] ACM - Asbestos-containing materials were used in the construction of this facility.
[4] LBP - Lead-based paint may have been used within this facility due to its date of construction (i.e., before 1978).

Table 2.0c: Facilities in Parcel P-2

Bldg.	Original Purpose	Area (ft^2)	HM[1]	Tanks[2]	ACM[3]	LBP[4]	Age
3688	Office	16900	No	No	Floor tile	No	1989
3695	Data Processing	8568	No	200 gallon AST	Floor tile	Yes	1969

Notes:
[1] HM - Hazardous material was known to have been stored in this facility.
[2] Tanks - Tanks were associated with the facility (e.g., AST - aboveground storage tank or UST - underground storage tank).
[3] ACM - Asbestos-containing materials were used in the construction of this facility.
[4] LBP - Lead-based paint may have been used within this facility due to its date of construction (i.e., before 1978).

Table 2.1 Demolished Facilities*

Table 2.1 Demolished Facilities** - Parcel A-1				
Facility	**Former Air Force Use**	**Current Use/Tenant**	**Year of Construction**	**Square Footage**
3050	Traffic Check House	Demolished	1974	203
3171	Vehicle Fuel Station	Demolished	1945	132
3212	Gas Meter Facility	Demolished	1942	16
3250	Medical Food Inspection	Demolished	1942	1,883
3260	Warehouse	Demolished	1956	8,373
3350	Storage Facility	Demolished	1942	9,668
3354	Maintenance Shop	Demolished	1942	9,796
3358	Storage	Demolished	1942	9,686
3370	Warehouse	Demolished	1942	9,974
3374	Warehouse	Demolished	1942	9,982

Table 2.1 Demolished Facilities** - Parcel A-1				
Facility	**Former Air Force Use**	**Current Use/Tenant**	**Year of Construction**	**Square Footage**
3378	Storage Facility	Demolished	1942	9,776
3386	Maintenance Shop	Demolished	1942	1,379
3387	Storage Facility	Demolished	1943	200
3388	Storage Facility	Demolished	1942	151
3389	Storage Facility	Demolished	1945	574
3430	Equipment Storage	Demolished	1942	3,305
3472	Storage Shed	Demolished	1986	42
3473	Storage Shed	Demolished	1986	60
3474	Maintenance Shop	Demolished	1942	1,334
3494	Maintenance Building	Demolished	1942	1,884
3580	Bath House	Demolished	1957	2,438
3585	Pool Water Treatment	Demolished	1957	178
3586	Storage Shed	Demolished	1984	177
3587	Pool Console	Demolished	1944	7,128
4001	Gas Vaporizer	Demolished	1986	240
4119	Petroleum Operations	Demolished	1977	192
4120	Petroleum Operations	Demolished	1942	2,907
4121	Air Compressor Plant	Demolished	1978	97
4210	Storage	Demolished	1976	967
4348	Aerospace Ground Equipment Shop	Demolished	1942	7,846
4359	Storage	Demolished	1944	200
4445	Maintenance Shop	Demolished	1955	11,905
4454	Storage	Demolished	1944	336
4473	Avionics Shop	Demolished	1961	25,436
4534	Utility Vault	Demolished	1945	639
4540	Office	Demolished	1953	2,791
4552	Office	Demolished	1942	2,928
4579	Airport Terminal	Demolished	1998	12,000
4588	Support Structure	Demolished	1990	Unk.
7004	Storage	Demolished	Unk.	1968
7008	Storage/ Vehicle Wash	Demolished	1968	1,695
7027	Gazebo	Demolished	Unk.	1,650
7030	Office	Demolished	1958	20,159
7032	Electric Power Station	Demolished	1959	296
7042	Storage	Demolished	1971	64
7048	Recreation Pavilion	Demolished	1988	900
7055	Office	Demolished	1969	21,718
7076	Storage	Demolished	1961	1.037
7095	Gas Vaporizer	Demolished	1986	240
7061	Hazardous Storage	Demolished	1984	136

Table 2.1 Demolished Facilities** - Parcel A-1				
Facility	**Former Air Force Use**	**Current Use/Tenant**	**Year of Construction**	**Square Footage**
7067	Liquid Oxygen Storage	Demolished	1990	146
7099	Test Stand	Demolished	1961	800
7100	South Ditch Oil-Water Skimmer	Skimmer removed; diversion vault remains	1977	Unk.
8154	Entry Control Building	Demolished	1980	168
8155	Swimming Pool	Demolished	1963	216
8156	Pool Water Treatment	Demolished	1963	108
8170	Readiness Crew	Demolished	1972	2,383
10075	TACAN station emergency power generator	Removed/prior to base closure	1956	524

Table 2.1 Demolished Facilities - Parcel P-1				
Facility	**Former Air Force Use**	**Current Use/Tenant***	**Year of Construction**	**Square Footage**
7050	Equipment Shop	Demolished	1958	6,971

*Any future development and land use must be consistent with the Final EIS and Disposal ROD.
** The fourteen facilities asterisked in Table 2.0a are being demolished by Sacramento County in late 2011 and early 2012, but have not been added to Table 2.1

3.0 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE

The environmental impacts caused by the proposal to dispose and reuse the Property have been adequately identified, analyzed, and disclosed in compliance with NEPA. These impacts were first identified and analyzed in the April 1992 *Final Environmental Impact Statement (FEIS) for the Disposal and Reuse of Mather AFB*. The 1993 ROD and 1994 SROD discussed the environmental impacts and associated mitigation measures. The Air Force did not find that any of the environmental impacts identified and analyzed in the FEIS were significant. The Air Force decided to proceed with the disposal and reuse decisions as documented in the ROD. The ROD has subsequently been amended or supplemented to change the mechanisms of conveyance for some parcels; however, the environmental impact analysis has essentially remained unchanged and is still valid.

4.0 ENVIRONMENTAL CONDITION OF THE PROPERTY

Based on a review of the Basewide EBS, 2011 SEBS, and the 2011 VSI, the Property is considered overall Department of Defense (DoD) Environmental Condition Category (ECC) 4, “areas where release, disposal, and/or migration of any hazardous substances has occurred, and

all removal or remedial actions to protect human health and the environment have been taken." For reference, DoD property categories are defined as follows:

> **Category 1**: Areas where no release or disposal of hazardous substances or petroleum products has occurred, including any migration of these substances from adjacent areas.
>
> **Category 2**: Areas where only release or disposal of petroleum products has occurred.
>
> **Category 3**: Areas where release, disposal, and/or migration of hazardous substances have occurred but at concentrations that do not require a removal or remedial response.
>
> **Category 4**: Areas where release, disposal, and/or migration of hazardous substances have occurred and all removal or remedial actions to protect human health and the environment have been taken.
>
> **Category 5**: Areas where release, disposal, and/or migration of hazardous substances has occurred and removal or remedial actions are underway, but all required actions have not yet been implemented.
>
> **Category 6**: Areas where release, disposal, and/or migration of hazardous substances have occurred, but required actions have not yet been implemented.
>
> **Category 7**: Areas that are not evaluated or require additional evaluation.

The Property's condition has changed from the condition identified in the original EBS. The Property was originally categorized in the 1993 EBS as DoD ECC 1, 2[1], 3, 6 and 7. A portion of Parcels A-1 and P-1 was designated ECC 6 and 7 in the EBS based on the contaminated groundwater identified beneath the Property and the ongoing soil contamination investigations at many of the Installation Restoration Program (IRP) sites located within the Property. Subsequent to the EBS, many of these sites were designated no further action in the RODs for Mather, and several other sites have received regulatory closure from the State of California and the US Environmental Protection Agency (USEPA) after remedial actions were completed. The remaining remedies have been demonstrated by the Air Force to be operating properly and successfully, and this determination received concurrence from USEPA in July 2011. The sites that were ECC 5 or 6 in 1993 are now ECC 4, and those that were ECC 7 in 1993 are now ECC 1, 2, 3, or 4. Therefore the DoD environmental condition category is now an overall Category 4. The Property is therefore suitable for transfer by Deed.

Remedial actions are ongoing on a number of IRP sites. Final remedies are in place for sites WP-07/ FT-11, ST-37/ST-39/SS-54, SD-57 and SD-59 in accordance with the Soil & Groundwater ROD (S&GW) (SVE) and the associated ESD dated February 2010; for Site OT-23 in accordance with the Basewide OU Sites ROD (SVE) and the associated ESD dated June 2010. Additionally, institutional controls have been selected as a component of the remedy and will be implemented at closed sites LF-03 (on adjacent property, but land-use restrictions extend onto Parcel A-1), and OT-89 to prevent disturbance of or exposure to residual contamination. Sites WP-07/FT-11, ST-20, LF-18, FT-10C, and ST-68 are currently in closure process; closure reports have been submitted to the State of California and USEPA. Land-use restrictions for sites WP-07/FT-11, LF-18, FT-10C, and ST-68 have been included in the submitted closure reports pending regulatory concurrence.

[1] DoD ECC 2 as defined in the 1993 Basewide EBS (defined as "areas where only storage of hazardous substances or petroleum products has occurred but no release, disposal, or migration from adjacent areas has occurred") which is the equivalent today of ECC 1

Three groundwater plumes, the Main Base (MB)/Strategic Air Command (SAC) Area, the source area of the Site 7 groundwater plume (also associated with WP-07), and the downgradient portion of the Northeast plume, underlie the Property for transfer. The part of the Northeast Plume that underlies a portion of the Property is at concentrations below the aquifer cleanup levels, and only a small part of the Site 7 Plume beneath the Property has concentrations above the aquifer cleanup levels. In conjunction with source area removal and vadose zone treatment, groundwater extraction (pump and treat) is the selected remedy for both the MB/SAC Area and Site 7 groundwater plumes, while long-term monitoring and institutional controls were the selected remedies for the Northeast Plume. The Air Force demonstrated that each of these groundwater remedies and remedies for their associated source sites were *Operating Properly and Successfully (OPS).* In July 2011, USEPA provided concurrence, indicating that the selected remedies are operating as designed, will meet remedial goals, and are protective of human health and the environment. Specific information on the remediation status of these IRP sites are provided in Section 5.2 of this FOST. The groundwater plumes are depicted in Attachment 1, Figure 2.

Additionally, a perchlorate- and trichloroethene (TCE)-contaminated groundwater plume, originating from an off-base source (the Inactive Rancho Cordova Test Site [IRCTS]), has been detected in groundwater underlying the Property. The parties (Boeing and Aerojet) responsible for the IRCTS perchlorate/TCE contamination have installed groundwater monitoring wells and groundwater extraction wells, including some within the Property, to remediate the contaminated groundwater plume. The location of the offsite perchlorate/TCE plume in relation to the Property is depicted in Attachment 1, Figure 2.

5.0 DEED RESTRICTIONS AND NOTIFICATIONS

The environmental documents listed in Section 1.2 were evaluated to identify environmental factors listed in Attachment 2 that may warrant constraints on certain activities in order to minimize or eliminate risks to human health or the environment. Such constraints are typically embodied as permanent or temporary restrictions in the Deed or as specific notifications to the Transferee. These restrictions or notifications may constitute or implement mitigations required by the Disposal and Reuse ROD or Supplemental RODs. The factors that require either deed restrictions or specific notifications are identified in Attachment 2 and are discussed below.

Transfer of the property will not occur until USEPA and DTSC have had an opportunity to review and provide comments on the environmental notifications and restrictions in the draft Deed.

The Air Force has determined that the remaining factors listed in Attachment 2 do not pose an unacceptable threat to human health or the environment, consistent with governing regulatory processes, and, therefore, do not require deed restrictions or notifications to the Transferee and thus are not discussed below.

5.1 Hazardous Substances Notification

Consistent with the provisions of Comprehensive Environmental Response, Compensation, and Liability Act CERCLA § 120(h)(3), which requires that whenever federal property on which hazardous substances were stored for one (1) year or more, released or disposed of, is conveyed by deed, each deed entered into for the conveyance of such property will include a notice of the type and quantity of such hazardous substances and of the time at which such storage, release or disposal took place. This notice requirement was codified at 40 CFR Part 373 which provides that the notice requirement applies only when hazardous substances are or have been stored for one (1) year or more in quantities greater than or equal to: (1) 1,000 kilograms or the hazardous substances CERCLA reportable quantity as described in 40 CFR Part 302.4, whichever is greater (40 CFR Part 373.2(b)); or (2) 1 kilogram if the substance is an acutely hazardous substance found in 40 CFR Part 261.30 (40 CFR Part 373.2(b)). Additionally, this regulation also provides that the notice required for the known release of hazardous substances applies only when the hazardous substances are or have been released in quantities greater than or equal to the substance's CERCLA reportable quantity found in 40 CFR Part 302.4.

The EBS identified facilities 4150, 4260, 4473, 7022, 7035 and 7075 as facilities that stored hazardous substances exceeding 1,000 kilograms, or reportable quantities of hazardous substances found in 40 CFR Part 302.4 (whichever is greater) for one (1) year or more. A Notice of Hazardous Substances Stored is provided in Attachment 3.

Portions of the Property once contained some level of hazardous substance contamination. As noted below in Section 5.2, hazardous substance releases to the soil and/or groundwater are known to have occurred. Because no documentation associated with these releases could be found, the date and quantities of release(s) at these sites are unknown, nor is it known whether the releases were in quantities greater than or equal to the substance's CERCLA reportable quantity found at 40 CFR Part 302.4. Since a release occurred, consistent with CERCLA requirement for notification of hazardous substance releases, a Notice of Hazardous Substance Released, to the extent such information is available, is provided in Attachment 4.

Additionally, a hazardous substance notice, based on available information, will be given in the Deed, providing notice of the type and quantity of hazardous substances and the time at which release took place and the response action taken.

5.2 Installation Restoration Program Sites and Institutional Controls

5.2.1 Installation Restoration Program (IRP) Sites

There are Thirty-nine (39) IRP sites and three groundwater plumes in five (5) OUs located within or partly within the Property where release, disposal, and/or migration of hazardous substances may have occurred, and all removal or remedial actions to protect human health and environment in accordance with CERCLA §120(h) have been taken. The determination that all remedial actions to protect human health and the environment have been taken is supported by the four signed Mather RODs (1996 S&GW OU ROD, 1998 Basewide OU

Sites ROD, 1995 Landfill OU ROD, 2006 Supplemental Basewide OU Sites ROD); ESDs to these RODs, with the latest signed in 2010 (ESD to the S&GW OU ROD and ESD to the Basewide OU ROD); remedial action completion reports and no further action (NFA) regulatory concurrence; and OPS demonstration reports, which have received regulatory concurrence, and which demonstrate that acceptable remedial actions have been implemented and are operating properly and successfully and achieving the remedial action goals of protecting human health and the environment. Several soil and groundwater remedies are ongoing. The sites for which remediation is ongoing are listed in Table 5.2A.

Since the 1993 EBS report, soil contamination source area removal and vadose zone treatment (SVE and bioventing) have been performed in accordance with the RODs and ESDs at those IRP sites that are located on the Property and that require cleanup. Land use restrictions (LUCs) and institutional controls (ICs) were also prescribed under these RODs, with the latest ESDs to the RODs approved in 2010 providing clarification of the environmental land-use restrictions that will be implemented upon property transfer.

A number of IRP sites within the Property have been closed with no further action as documented in the 1996 S&GW ROD, the 1998 Basewide OU Sites ROD, the 1995 Landfill OU ROD, and the 2006 Supplemental Basewide OU Sites ROD. This means that no remediation was required by the ROD. No further action was selected and approved in the S&GW ROD for sites FT-10 (note this is a different location than FT-10C), RW-16, OT-21, ST-24, ST-26, ST-38, ST-45, ST-46, ST-51, SD-55, SD-61, SD-64, SD-66, ST-73 and ST-74; in the Basewide OU Sites ROD for sites FT-08, SD-67 and SD-84; in the Landfill OU ROD for site LF01; and in the Supplemental Basewide OU Sites ROD for site SD-85. The sites for which no further action was required by a CERCLA ROD are listed in Table 5.2B.

All actions necessary to protect human health and the environment, as established in the RODs and ESDs, have been taken, allowing a CERCLA §120(h)(3) covenant for attesting that all such actions have been taken for the subject Property. Some of these sites have ongoing remedial actions in place (Table 5.2A); the others either required no remedial action or have been closed after completion of remedial action (Table 5.2B). Sites for which remedial action has been completed have site closures documented with remedial action completion reports and concurrence letters from USEPA and/or the State of California.

ICs were selected and are being implemented at closed sites LF-03, (on adjacent property, but with ICs extending onto Parcel A-1), and OT-89 (on Parcel A-1) to prevent disturbance of or exposure to residual contamination. Sites ST-20, LF-18, FT-10C, and ST-68 are currently in closure process, and closure reports have been submitted to the State of California and USEPA; the closure reports recommend ICs in the form of land-use restrictions for sites LF-18, FT-10C, and ST-68 so that any new buildings built at these sites will incorporate measures to keep vapors from entering the buildings. Similar ICs have been authorized for other sites still undergoing remediation or going through the closure process: WP-07/FT-11; ST-37/ST-39/SS-54; SD-57; and SD-59. ICs to prevent exposure to contaminated groundwater or interfere with groundwater cleanup are in place for the MB/SAC Area Plume and for the Site 7 Plume. These ICs are discussed in more detail below and are defined in the RODs and subsequent ESD documents.

As previously mentioned, remedial actions are ongoing for a number of sites and plumes (Table 5.2A). In situ treatment by SVE and/or bioventing are the selected and in place remedies for sites WP-07/FT-11, ST-37/ST-39/SS-54, SD-57, SD-59 as prescribed in the S&GW OU ROD and for OT-23 as prescribed in the Basewide OU Sites ROD. As for groundwater contamination, the selected and in place remedies for both the MB/SAC Area and Site 7 plumes consist of extraction, treatment by air stripping, re-injection of treated groundwater into the aquifer, land use/institutional controls, and long-term groundwater monitoring. Long-term groundwater monitoring with land use/institutional controls was the selected remedy for the Northeast Plume. The Air Force Real Property Agency (AFRPA) submitted OPS demonstration reports for the MB/SAC Area, Site 7, and Northeast plumes and their source areas, and these received concurrence from USEPA in July 2011, indicating that the remedial actions implemented for these sites, in conjunction with source area removals and vadose zone treatment conducted under the S&GW and Basewide OU Sites RODs and ESDs, are operating properly and successfully, are achieving remedial goals, and are protective of human health and the environment.

A map of IRP sites located on the Property is included as Attachment 1, Figure 1. A summary of the status of IRP sites with remedies in place and demonstrated to be OPS is provided in Table 5.2A; this table also includes sites that were closed but which have institutional controls. Sites that are closed with no institutional controls are listed in Table 5.2B. Until regulatory closure concurrences are received, sites undergoing closure process are included in Table 5.2A.

Table 5.2A

IRP Sites with Ongoing Final Remedies in Place

Table 5.2A: IRP Sites with Ongoing Final Remedies in Place				
Parcel	**OU**	**Site (s)**	**Description**	**Summarized Selected Remedy**
A-1	Soil	WP-07 FT-11	The two sites were grouped together for remediation purposes. Site WP-07 is located along the southern boundary of the base and was a former gravel pit that was used as a disposal area for construction rubble and POL waste between 1953 and 1966. Site FT-11 is located immediately north of Site WP-07. Fire training exercises were conducted at FT-11 from 1958 until 1993. WP-07 has shallow and deep subsurface contamination, while FT-11 has surface and subsurface soil contamination. Petroleum fuels in the gas and diesel ranges are the contaminants of concerns (COCs). Landfill closure at Site WP-07 and SVE at WP-07 and Site FT-11 were the major components of the selected remedy for the sites as indicated in the *Soil OU Sites and Groundwater OU Plumes ROD*. The SVE system operated from 1998 until 2007 when the treatment system was converted from SVE to bioventing. The bioventing system was operated	Landfill Cap and SVE/Bioventing are the selected remedies under the Soils OU per the *Soil OU Sites and Groundwater OU Plumes ROD* dated 1996. Soil-related and landfill-related ICs were clarified in the 2010 ESD to the Soils OU per the *Soil OU Sites and Groundwater OU Plumes ROD.* See also Groundwater OU remedy (groundwater extraction system) and LUC/ICs requirements described under Site 7 groundwater plume (WP-07). A report proposing

Table 5.2A: IRP Sites with Ongoing Final Remedies in Place				
			until May 2009, when it was determined the site was respiring adequately without active injection of air. Additional vapor extraction wells were added in June 1999 and November 2002. As of April 10, 2007, the SVE system had removed an estimated 99,529 pounds (lbs) of volatile organic compounds (VOCs) from Site WP-07, of which 30 lbs were chlorinated compounds and the rest petroleum products, and an estimated 91,070 lbs of petroleum products from FT-11. A perched water extraction system was evaluated to address partially submerged SVE/bioventing well screens but was determined to be impractical.	termination of the SVE and bioventing remediation was submitted in 2011.
A-1	Basewide	FT-10C ST-68	Site FT-10C is the site of a former fire training area, located in the northwest portion of Parcel A-1. Buried debris and contaminated soil were excavated and disposed at LF-04 under a removal action. Adjacent site ST-68 was a former JP-4 jet fuel storage facility and the former location of 18 USTs. Petroleum fuels, lead (added by ESD), and chlorinated VOCs are the COCs. These sites were combined for remediation. SVE was selected as the remedy in the *Basewide OU Sites ROD*. The system was installed and began operating in 1997 (influent VOC concentration of 50 ppmv). The SVE system was shut down on July 28, 2008 for a rebound study while the closure report was prepared and has remained off line since. The SVE system had removed 16,625 lbs of VOCs from the combined sites. An ESD to the ROD was issued in August 2008 supporting a lead-contaminated soil excavation at FT-10C, which was completed in November 2008. A final site closure report recommending land-use restrictions was issued in May 2010. The proposed land-use restrictions require any new occupied buildings at the site to be built with measures to prevent contaminant vapors from entering the building from the underlying soil.	SVE is the selected remedy per the *Basewide OU Sites ROD* dated 1998. Additional soil excavation for lead at FT-10C was conducted in 2008 in accordance with an ESD to the ROD. LUC/ICs to prevent exposure to VOCs through soil disturbance and/or vapor intrusion; to protect and to allow continued Air Force (AF) access to remedial system components. Closure report submitted in May 2010 for FT-10C and ST-68. AFRPA is still waiting for concurrence from U.S. EPA ICs were clarified in the 2010 ESD to the Basewide *OU ROD.*
A-1	Basewide	LF-18	Reported burial site located adjacent to the aircraft parking apron at the west end of the flight line. During investigation no buried materials were found; however, chlorinated VOC contamination in soil was discovered that may have originated from runoff from aircraft washing activities at the nearby apron. SVE was the selected remedy in the *Basewide OU Sites ROD* and the SVE system operated from 2000 through 2008. Site LF-18 vapor extraction wells were connected to the SD-59 SVE system on August 2, 2001. The SVE system at Site 18 was taken off line in November 2008 during preparation of the closure report; the system had removed 8,112 lbs of VOCs, of which 329 lbs were chlorinated (including SVE from wells at Site SD-59). A closure report for LF-18 was finalized in May 2010and revised with change pages in October 2010 to recommend land-use restrictions to prevent	SVE is the selected remedy per the *Basewide OU Sites ROD; 2010 ESD to the Basewide ROD* imposes additional LUCs and ICs to prevent unacceptable risk exposure to VOCs, protect the remedial system in place, and preserve access to remedial system until site remediation is complete. Closure report submitted in May 2010 and revised in October 2010 to add ICs. AFRPA is still waiting for concurrence

Table 5.2A: IRP Sites with Ongoing Final Remedies in Place				
			potential migration of vapors into the indoor air of any new occupied buildings that might be constructed near LF-18.	from U.S. EPA ICs were clarified in the 2010 ESD to the Basewide *OU ROD.*
A-1	Soil and Basewide	ST-20	Former sewage treatment plant UST and sludge drying beds. Metals were the COCs in the Soil OU remedy; lead and PAHs were the COCs for the Basewide OU remedy. Contaminated sludge and soil were excavated and the site was closed with groundwater monitoring requirements that were satisfied as of second quarter 2009. There are no ICs required for Site ST-20.	*Soil OU Sites and Groundwater OU Plumes ROD* and *Basewide OU Site ROD*--Closed; report of the completed groundwater monitoring issued in 2011 (AR# 2994); AFRPA is still waiting for concurrence from U.S. EPA and the State. No ICs are required.
A-1	Basewide	OT-23	Sanitary sewer system. During the Group 2 RI, OT-23 was redefined to include all sewer lines on the Main Base that serviced buildings where TCE was reportedly stored or used. However, no significant contamination was found during the Group 2 RI. During the Additional Site Characterization, a soil gas survey was conducted and VOC contamination was found in some soil boring samples collected near sewer lines. On this basis, the *Basewide OU Sites ROD* identified four areas of the sewer system (subsites 23a through 23d) that required remedial action. Except for OT-23c, the other subsites were linked to remedial actions at other sites (i.e., LF-18, and ST-37/ST-39/SS-54). Subsite 23c was further investigated in 1998 and expanded to include a release area near a former dry cleaning plant (north of the Property), which was a major source of groundwater contamination. PCE is the COC. SVE was the selected remedy in the *Basewide OU Sites ROD* and an SVE system has operated at OT-23c since 2000. As of June 2010, the SVE system had removed 5,328 lbs of VOCs, 3,488 lbs of which were chlorinated compounds.	SVE is the selected remedy per the *Basewide OU Sites ROD; 2010 ESD to the Basewide ROD* imposes additional LUCs and ICs to prevent unacceptable risk exposure to VOCs at site OT-23c, protect the remedial system in place, and to allow AF continued access to remedial system until site remediation is complete. ICs were clarified in the 2010 ESD to the Basewide *OU ROD.*
A-1	Soil	ST-37, ST-39, SS-54	Site ST-37 is located in the northwest portion of the base and is associated with five USTs at Building 3389. Site ST-39 operated as a RCRA hazardous waste storage facility from 1988 to 1993. Prior to that time, it was a storage and distribution facility for aviation gasoline. It is a fenced compound in the Main Base that contains several concrete pads and buildings. The site contained eight USTs, five OWS, and two ASTs, which were all removed in the early 1990s. Site SS-54 was a RCRA 90-day accumulation point at the Aerospace Ground Equipment Repair Shop (Facility 4348) that consisted of a fenced asphalt-paved yard.	SVE/excavation is the selected remedy per the *Soil OU Sites and Groundwater OU Plumes ROD* dated 1996. Soil-related ICs were clarified in the 2010 ESD to the *Soil OU Sites and Groundwater OU Plumes ROD.*

Table 5.2A: IRP Sites with Ongoing Final Remedies in Place				
			Petroleum fuel, oil & grease, PCE and TCE contamination was identified in surface and shallow/deep subsurface soils at these three sites, which were grouped together for remediation. Only fuel-related contaminants and oil and grease were identified as COCs in the ROD. SVE and excavation of surface soil contamination were selected as the remedy for ST-37/ST-39/SS-54 in the *Soil OU Sites and Groundwater OU Plumes ROD.* Contaminated soil was further evaluated and determined not to require excavation. An SVE system has been operating at ST-37/ST-39/SS-54 since 1998. Additionally in 2001, ST-29/ST-71 vapor extraction wells were connected to this SVE system. A replacement SVE treatment unit began operating on February 12, 2007. As of June 2010, the SVE system had removed 271,828 lbs of VOCs, 245 lbs of which were chlorinated compounds, including mass from Site 29/71 after the extraction systems were combined in 2001. An additional 508,307 lbs of non-chlorinated VOCs was removed from Site 29/71 before it was connected to the Site ST-37/ST-39/SS-54 extraction system.	
A-1	Soil	SD-57	Site SD-57 is located in the central portion of the SAC area and consists of the former location of an OWS for the Aerospace Ground Equipment Repair Shop wash rack (Facility 7019). Oils, fuels, hydraulic fluid and PD-680 were separated from wastewater in the OWS and water was discharged to the sanitary sewer system. Shallow subsurface soil contamination (TCE and gasoline) was identified at SD-57. SVE was selected as the remedy for SD-57 in the *Soil OU Sites and Groundwater OU Plumes ROD.* An SVE system has been operating at SD-57 since 1997. As of June 2010, the SVE system had removed 6,156 lbs of VOCs, 3087 lbs of which were chlorinated compounds. Two new deep vapor wells were connected in 2008 for extraction of carbon tetrachloride contamination in the deep vadose zone. The 2010 OPS Demonstration Report for the MB/SAC plume, pending USEPA concurrence, indicates that the remedial actions taken for SD-57 are OPS and achieving the removal action objective (RAO) of protecting groundwater, human health and the environment.	SVE is the selected remedy per the *Soil OU Sites and Groundwater OU Plumes ROD* dated 1996. OPS in conjunction with *Main Base/SAC Area Groundwater Plume Demonstration of Groundwater Operable Unit Remedial Action Operating Properly and Successfully* (AFRPA, June 2011). Soil-related ICs were clarified in the 2010 ESD to the Soils OU per the *Soil OU Sites and Groundwater OU Plumes ROD.*
A-1	Soil	SD-59	Site SD-59 is located in the southern portion of the Main Base and consists of the former site of an OWS for the air training command (ATC) wash rack near Building 4251. Oils, fuels, hydraulic fluid and antifreeze were separated from wastewater in the OWS and water was discharged to the sanitary sewer system. Shallow subsurface soil contamination (petroleum fuels, oil & grease and chlorinated VOCs) was identified at SD-59; only	Excavation is the selected remedy per the *Soil OU Sites and Groundwater OU Plumes ROD* dated 1996. SVE was implemented in 2000 in accordance with a ROD ESD. Additional vapor monitoring points

Table 5.2A: IRP Sites with Ongoing Final Remedies in Place				
			petroleum contamination in the gas and diesel ranges were identified as COCs in the ROD. Excavation of contaminated soil was selected as the remedy for SD-59 in the *Soil OU Sites and Groundwater OU Plumes ROD.* Contaminated soil was excavated, but residual subsurface soil contamination requiring remediation and an ESD to the ROD was issued to augment the remedy with SVE. An SVE system has been operating at SD-59 since 2000 to remove residual contamination in subsurface soil. Site LF-18 vapor extraction wells were connected to this SVE system on August 2, 2001. Additional vapor monitoring points and extraction wells were installed at the site in 2008. As of June 2010, the SVE system had removed 13,220 lbs of VOCs, 501 lbs of which were chlorinated compounds (including Site LF-18). The 2010 OPS Demonstration Report for the SAC/Main base plume, pending USEPA concurrence, indicates that the remedial actions taken for SD-59 are OPS and achieving the RAO of protecting groundwater, human health and the environment.	and extraction wells added in 2008. OPS per *Main Base/SAC Area Groundwater Plume Demonstration of Groundwater Operable Unit Remedial Action Operating Properly and Successfully (*AFRPA, June 2011). Soil-related ICs were clarified in the 2010 ESD to the Soils OU per the *Soil OU Sites and Groundwater OU Plumes ROD*
A-1	Supplemental Basewide	OT-89	Former trap range that was used in the 1940s and 1950s. An investigation revealed that two sets of firing stations were removed in the 1950s; the shot fall area of one of these was covered with imported fill to a depth of approximately 8 to 10 feet. The site was investigated; lead was identified as the COC. Contaminated soil was partially excavated, but some contamination was left in place. There was a confirmatory groundwater monitoring requirement for a period of years. At this point, the groundwater monitoring requirements have been satisfied and monitoring has ended. The site was closed with ICs/LUCs (digging restrictions).	*Supplemental Basewide OU Sites ROD*-- confirmatory monitoring of groundwater for a finite period (which was satisfied) and ICs. The ICs are described in the ROD.
A-1 P-1 P-2	Groundwater	Main Base/ SAC Area Plume	The Main Base and SAC Area (MB/SAC) plumes are commingled and are referred to in the *Soil OU Sites and Groundwater OU Plumes ROD* as the Main Base/SAC Area Plume for purposes of cleanup under a common remedy. The MB/SAC Plume lies beneath much of the base north of the runways and extends beneath adjacent off-base areas to the west and southwest. PCE, TCE, and carbon tetrachloride are the most widespread contaminants in the MBSA Plume. The primary sources are IRP sites OT-23 (MB) and SD-57 (SAC Area). Groundwater contamination at concentrations at or above the maximum contaminant level (MCL) reaches a depth of approximately 250 feet below ground surface (bgs) (into the hydrostratigraphic unit (HSU) D). A groundwater pump-and-treat system was installed in phases: Phase I began operating in April 1998 to	Pump-and-treat is the selected remedy for groundwater contamination per the *Soil OU Sites and Groundwater OU Plumes ROD.* Determined to be operating properly and successfully with EPA concurrence in July 2011. Groundwater-related ICs were clarified in clarified in the 2010 ESD to the Soils OU per the *Soil OU Sites and Groundwater OU Plumes ROD*

Table 5.2A: IRP Sites with Ongoing Final Remedies in Place				
			address higher concentrations (also termed hot spots) on base. Phase II extraction wells for hot spots off base and Phase III extraction wells to augment plume capture were added in January 2000, and Phase IV extraction wells were added in 2002, 2004, and 2008 to increase extraction and augment off-base capture. Overall contaminant concentrations are decreasing as a result of the selected remedy, although there are portions of the plume beyond the capture of the extraction system, as identified in the 2009 capture zone analysis reports (references 37, 41). The groundwater treatment plant was operating as of October 2010 at approximately 1500 gallons per minute (gpm) with 25 extraction wells. As of February 2010, the system had treated about 7.5 billion gallons of water removed 3,524 lbs of VOCs. The AF submitted a report demonstrating OPS for USEPA concurrence in April 2011 for the MB/SAC plume; the report, indicates that the remedial actions taken for the MB/SAC groundwater plume in conjunction with the remedial actions taken for the soil and vadose zone source areas are OPS and achieving the RAO of protecting groundwater and human health.	
A-1	Groundwater	Northeast Plume	The Northeast Plume consists of groundwater contamination emanating from one or more source areas for PCE and cis-1,2-dichloroethene (cis-1,2-DCE) in the vicinity of the IRP Site LF-03 and Site LF-04 landfills, and a source of 1,2-dichloropropane (DCP) at or near the former location of the IRP Site LF-05 landfill (LF-05 was excavated and consolidated into LF-04). The area of the Northeast Plume in which contaminant concentrations exceed cleanup standards does not extend beneath the Property and is limited to the vicinity of landfill sites LF-03 and LF-04. PCE and cis-1,2-DCE are the primary groundwater contaminants, which are present in the HSU C horizon. The *Soil OU Sites and Groundwater OU Plumes ROD* selected long-term monitoring with ICs as the remedy for groundwater contamination. The AF submitted a report demonstrating OPS for USEPA concurrence in April 2011.	Long-term monitoring and ICs are the selected remedy for the groundwater contamination per the *Soil OU Sites and Groundwater OU Plumes ROD.* Determined to be operating properly and successfully with EPA concurrence in July 2011. Groundwater-related ICs were clarified in clarified in the 2010 ESD to the Soils OU per the *Soil OU Sites and Groundwater OU Plumes ROD*
A-1	Groundwater	Site 7 Plume (WP-07)	The Site 7 groundwater plume extends southward off base from the Site 7 source near the southern base boundary, approximately 4,125 feet southwest beneath adjacent off-base areas. PCE, TCE, cis-1,2-DCE and 1,2-dichloroethane (1,2-DCA) are the most widespread contaminants in the Site 7 Plume. Groundwater contamination reaches a depth of approximately 180 feet bgs (into the Unit B/C HSZs). A groundwater pump-and-treat system was installed in 1998 with a single off-base extraction well; another off-base extraction well was added later and the first well decommissioned to	Pump-and-treat is the selected remedy for groundwater contamination per the Soil OU Sites and Groundwater OU Plumes ROD. LUC/ICs to prevent potable use of contaminated

Table 5.2A: IRP Sites with Ongoing Final Remedies in Place				
			allow gravel mining by the landowner and later replaced. System operation was conducted with a single extraction well for a total of 28 months from 1998 through 2006, with several interruptions due to off-base aggregate mining and related reclamation activities, but has been operating with two extraction wells since late 2006. Five new monitoring wells were installed in third quarter 2008 to complete the groundwater monitoring network for the Site 7 Plume. During the first quarter of 2010, the average extract rate was 70 gpm and the average influent VOC concentration was 23 µg/L. As of February 4, 2010, the Site 7 treatment plant had treated about 176 million gallons of water and removed about 44 lbs of VOCs. Overall, concentrations have declined during the remedial action. The AF submitted a report demonstrating OPS for USEPA concurrence in April 2011.	groundwater and protect integrity and AF access to remedial system. Determined to be operating properly and successfully with EPA concurrence in July 2011. Groundwater-related ICs were clarified in clarified in the 2010 ESD to the Soils OU per the Soil OU Sites and Groundwater OU Plumes ROD.

Table 5.2B

Closed IRP Sites

Table 5.2B: Closed IRP Sites				
Parcel	**OU**	**Site**	**Description**	**Regulatory Concurrence**
A-1	Landfill	LF-01	Former landfill. No evidence of refuse was found during investigations. The site was selected for no further action in the ROD.	*Landfill OU ROD*-No further action (NFA)
A-1	Landfill	LF-02	Former landfill used by the Air Force for municipal-type solid waste disposal from 1942 to 1950. The site was investigated and wastes were excavated and consolidated at LF-04 (ESD to the ROD was issued for selecting an alternative remedy to capping) with confirmatory groundwater monitoring requirements for a period of years. At this point, the groundwater monitoring requirements have been satisfied and monitoring has ended.	*Basewide OU ROD (after Landfill OU ROD remedy was revised by Removal Action Memorandum and ESD)*--NFA/ confirmatory monitoring of groundwater have been completed.
A-1	Basewide	FT-08	Fire Training Area No. 1. Historical aerial photographs located the site; however, no evidence was found of a burn pit during the RI. Investigations at Site 8 found no evidence to suggest that this site has been a source for contamination. Investigations have revealed no COCs; therefore, no threat to human health or the environment exists; no further action was selected in the ROD.	*Basewide OU Sites ROD*-NFA

Table 5.2B: Closed IRP Sites				
A-1	Soil	FT-10	Site 10 is the assumed location of a fire-training area used between 1947 and 1958, located under the SAC refueling-tanker loading apron. This site was not investigated during the RI, and groundwater monitoring revealed no indication that this site was a source for groundwater contamination. However, another location, just north of the former refueling apron, was found to be the actual location of the fire-training area. The new location, FT-10C, was investigated in 1995 and included in the *Basewide OU Sites ROD.* Site FT-10 was selected for no further action in the *Soil OU Sites and Groundwater OU Plumes ROD.*	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA
A-1	Soil	SD-13	Drainage Ditch No. 1, an adjacent OWS associated with an aircraft wash rack (Facility 3990), and a depression investigated for soil contamination. The drainage ditch received storm-water runoff from off base, and may have also received overflow from the OWS. The site was investigated and metals, petroleum fuels and polycyclic aromatic hydrocarbon (PAHs) were identified as COCs. Contaminated soil was excavated and the site closed with no land- use restrictions.	*Soil OU Sites and Groundwater OU Plumes ROD*— Closed; EPA concurrence letter dated 9/27/2000
A-1	Soil	SD-15	Drainage Ditch No. 3, also known as the West Ditch that drains the former SAC portion of Mather. Prior to the 1970's, it received discharge of industrial waste; these discharge lines were later connected to the sanitary sewer system. It also includes a former UST and an OWS (Facility 7039) that was cleaned and decontaminated. The site was investigated and metals, pesticides, petroleum fuels and PAHs were identified as COCs. UST was removed in 1994. Contaminated soil was excavated, site closed, and no further action was recommended.	*Soil OU Sites and Groundwater OU Plumes ROD*— Closed; EPA concurrence letter dated 9/10/2001
A-1	Soil	RW-16	Located directly under Building 8170, that has since been demolished. In the late 1950's, approximately sixty low-level radioactive electron tubes were reportedly buried in 15-foot auger holes. The electron tubes were placed inside one-gallon containers and encased in concrete. Investigations revealed no radiation at the surface above background levels, nor in a nearby groundwater monitoring well. There was no surface sign of the burial after the building demolition. There is no significant health risk due to exposure to the intact concrete containing the electron tubes. There will be a deed notification to warn future landowners will that any excavation at the site should proceed with caution to avoid inadvertent exposure to broken concrete containers and/or electron tubes.	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA
A-1	Soil	OT-21	An asphalt rubble disposal area northeast of Facility 7125. The site was investigated; no contamination was found and the site was selected for NFA.	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA

Table 5.2B: Closed IRP Sites				
A-1	Soil	ST-24	SAC aircraft refueling-tanker loading apron and an adjacent low, grassy area located south and west of the loading area. In 1983, approximately 8,000 gallons of JP-4 were spilled on the concrete tanker loading area during refueling operations. The site was investigated; no contamination was found and was selected for NFA.	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA
A-1	Soil	ST-26	250-gallon motor gasoline UST, located in the extreme southwest corner of the base. The tank and its associated piping were installed in 1956 and removed in 1988. The site was investigated; remediation was not required and was selected for NFA.	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA; also closure letter in 2001 from CVWB
A-1	Soil	ST-38	Building 3388 USTs located near the intersection of Fourth Street and Air Corps Way. Two steel 5,000-gallon USTs (Tanks 3388A and 3388B), which were removed in 1988, were used to store gasoline, diesel, and alcohols from 1945 to 1977. The site was investigated; no contamination was found and was selected for NFA.	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA; also closure letter in 2001 from CVWB
A-1	Soil	ST-45	UST located at the old missile fueling facility (Facility 7003). The UST was used to store ammonia from the early 1960s until 1978 and was removed in 1989. The site was investigated; no contamination was found and was selected for NFA.	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA; also closed by County letter in 1991
A-1	Soil	ST-46	UST located in the northeast portion of the base, in the SAC Alert Facility (8158) and consisted of a steel 250-gallon diesel fuel UST. The UST and its associated piping were removed in 1993. The site was investigated with no contamination was found and was selected for NFA.	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA; also closed by County letter in 1996
A-1	Soil	ST-51	Former UST 10030 located in the north central portion of the base near the northeast end of Runway 22L. The site consisted of a 275-gallon diesel fuel UST. The UST was removed in 1993. The site was investigated; no contamination was found and was recommended for NFA.	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA; also closed by County letter in 1996
A-1	Soil	SD-55	OWS 7038, located in the western portion of the SAC area, approximately 120 feet west of Building 7035. Prior to 1971, OWS 7038 reportedly received waste TCE, PCE, antifreeze, methyl ethyl ketone, and methylene chloride produced during maintenance operations. The site was investigated; no contamination was found and was selected for no further action.	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA

Table 5.2B: Closed IRP Sites				
A-1	Soil	SD-60	Maintenance Dock North OWS, Facility 6900. The site was investigated with xylenes and petroleum fuel (gasoline) being identified as the COCs. Contaminated soil was remediated by excavation and SVE. A Remedial Action Report (RAR) was prepared, and with regulator concurrence, the site was closed.	*Soil OU Sites and Groundwater OU Plumes ROD*-Closed with RAR in 2002
A-1	Soil	SD-61	OWS that supported Building 7005, located in the SAC area. It was reported that TCE, PCE, methyl ethyl ketone, and other solvents were used in Building 7005 in the 1960s and 1970s. The site was investigated; no contamination was found and the site was selected for NFA.	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA
A-1	Soil	OT-62	Jet Engine Test Stand to include a former OWS. The site was investigated and metals, petroleum fuels and PAHs were identified as COCs. Contaminated soil was excavated and the OWS was removed. A RAR was prepared, and with EPA concurrence, the site was closed.	*Soil OU Sites and Groundwater OU Plumes ROD*-Closed with RAR; EPA concurrence letter dated 6/11/2001
A-1	Soil	SD-64	OWS 4120 located in the far west portion of the Main Base at the fuel tanker yard, approximately 240 feet northeast of Building 4120. The site was investigated; the OWS was cleaned and decontaminated; no contamination was found and was selected for NFA.	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA
A-1	Soil	SD-65	OWS 6910 located in the north section of the SAC area at the old AGE Shop, approximately 35 feet northeast of Building 7009. The site was investigated and metals, petroleum fuels and oil & grease were identified as COCs. Contaminated soil was excavated. A RAR was prepared, and with regulator concurrence, the site was closed.	*Soil OU Sites and Groundwater OU Plumes ROD*-Closed with RAR in 2000; EPA concurrence letter dated 9/25/2000
A-1	Soil	SD-66	OWS 6915 located in the central portion of the SAC area at the jet engine repair shop, approximately 10 feet north of Building 7024. The site was investigated; no contamination was found and was selected for no further action.	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA
A-1	Basewide	SD-67	SAC area shop drainage system. It consists of storm drains, sanitary sewers (approximately 14,200 feet of sewer line), and an open ditch (approximately 1.200 feet in length) near Building 7008. The site was investigated; no contamination was found and was selected for no further action.	*Basewide OU Sites ROD*-NFA
A-1	Soil	ST-73	Former UST 10015 located in the north-central portion of the base on Alert Road near the approach end of the Runway 22. The tank was reportedly a 1,000-gallon diesel fuel tank for an emergency generator. The tank passed a leak test in 1988 and was removed in 1993. The site was investigated; no contamination was found and was selected for no further action.	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA; also closed by County letter in 1996

Table 5.2B: Closed IRP Sites				
A-1	Soil	ST-74	UST 10065 located west of Building 10065. The UST was a 1,000-gallon diesel fuel tank for an emergency generator. The UST was removed in 1993. The site was investigated; no contamination was found and was selected for NFA.	*Soil OU Sites and Groundwater OU Plumes ROD*-NFA; also closed by County letter in 1996.
A-1	Basewide	SD-84	Sanitary sewer system in the vicinity of the runway that runs from the SAC Area to the Sewage Treatment Facility, approximately 4,200 feet in length. The sewer line was identified as a possible source of vadose zone and groundwater contamination. The site was investigated; no contamination was found and was selected for NFA.	*Basewide OU Sites ROD*-NFA
A-1	Supplemental Basewide	SD-85	South Ditch, an engineered drainage ditch that collects storm runoff from the southern half of Mather, as well as from the northern half via the Site 15 (West Ditch) and the Site 13 ditches. The site was investigated and metals, PAHs, PCBs, pesticides, dioxins, diesel and oil & grease were identified as COCs. Contaminated soil was excavated under removal authority and the site was selected for no further action in the ROD.	*Supplemental Basewide OU Sites ROD*-NFA

Air Force-owned groundwater extraction, injection, or monitoring wells are currently located on Parcel A-1. Groundwater well identification and survey coordinates are listed in Table 5.2C below. This table also lists groundwater monitoring and extraction wells that are not owned by the Air Force, but are associated with the Inactive Rancho Cordova Test Site groundwater remediation program. Vapor wells owned by the Air Force that are located in Parcel A-1 are listed in Table 5-2D, with available survey coordinates, and vapor wells owned by the Air Force that are located in Parcel P-2 are listed in Table 5-2E. The locations of the groundwater monitoring, extraction, and injection wells located within the Property are shown on the map in Attachment1, Figure 3. However for the most up-to-date information on the locations of Air Force groundwater and vapor wells, the reader is referred to the most recent annual report(s) for the groundwater and the soil vapor extraction/bioventing programs.

Additionally, perchlorate/TCE contamination in the groundwater (deeper than 300 feet bgs at the subject Property) has migrated beneath the Property from an off-site source upgradient from Mather (i.e., the IRCTS plume). The perchlorate/TCE contamination is subject to cleanup by Boeing/Aerojet under regulatory oversight from the State of California Department of Toxic Substances Control (DTSC) and the CVWB. Boeing/Aerojet monitoring wells in Parcel A-1 with perchlorate concentrations exceeding the CA DHS PHG of 6 µg/L are listed in the table above; TCE was only detected in STSW-82B at a concentration below the cleanup level (5 µg/L). The highest concentrations beneath Parcel A-1 are indicated by results from well STSW-61, about 100 feet upgradient of the parcel, with 829 µg/L perchlorate in a May 2009 sample. Maps showing the well locations and tables with well depths may be viewed at:

http://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2665399134/SL205493018.PDF

A list of selected IRCTS wells located on the Property is provided in Table 5.2.c above. Locations of the Aerojet/Boeing wells on the Property are provided in Attachment 3, Figure 3 of the SEBS.

Table 5.2C
Groundwater Wells Located on Parcel A-1*

Well ID	Northing	Easting	Well ID	Northing	Easting
Groundwater wells owned by the Air Force					
7-EW-1	1956475.46	6758252.73	MAFB-116	1967296.26	6764605.2
7-EW-2	1958078.75	6759265.54	MAFB-125	1968005.93	6765580.31
7-IW-01	1959183	6760509	MAFB-126	1968428.03	6766206.98
7-IW-02	1959245	6761429	MAFB-127	1966471.88	6768504.07
7-IW-03	1959252	6761598	MAFB-128	1965784.09	6768720.2
7-IW-04	1959260	6761805	MAFB-129	1966552.3	6769100.6
7-PZ-23	1959285	6761223	MAFB-148	1959681.9	6760938.61
7-PZ-24	1959481	6761566	MAFB-149	1959571.08	6760239.36
7-PZ-25	1959322	6761962	MAFB-151	1968281.77	6767504.05
7-PZ-26	1959192	6761635	MAFB-152	1967271.69	6765918.03
7-PZ-37	1959181.6	6760268.604	MAFB-158	1964269.33	6757415.9
7-PZ-37P	1959181.786	6760269.643	MAFB-160	1968110.93	6759355.8
FFS MW15-6	1965671.893	6759154.92	MAFB-164	1966636.37	6756931.54
MAFB-012	1968926.15	6766732.4	MAFB-165	1965490.46	6756966.86
MAFB-013	1968720.7	6765707.13	MAFB-166	1965056.81	6757032.4
MAFB-033	1967555.14	6759062.25	MAFB-167	1963742.57	6757096.87
MAFB-039	1960215.02	6760212.83	MAFB-168	1962899.63	6757155.27
MAFB-043	1960078.36	6760393.27	MAFB-169	1966261.14	6758280.11
MAFB-044	1959934.45	6760817.86	MAFB-170	1965305.04	6757558.38
MAFB-046	1959119.51	6757150.59	MAFB-171	1964254.78	6757416.94
MAFB-047	1963758.66	6757075.2	MAFB-172	1962011.06	6756194.98
MAFB-048	1966654.72	6756956.32	MAFB-179	1968908.29	6766722.63
MAFB-058	1959163.43	6760264.83	MAFB-184	1960552.59	6760166.59
MAFB-059	1959140.97	6757130.79	MAFB-185	1960802.66	6760541.66
MAFB-060	1963739.4	6757080.56	MAFB-186	1969003.69	6760008.44
MAFB-061	1965040.32	6757018.98	MAFB-187	1968927.22	6760359.35
MAFB-062	1965486.86	6756999.58	MAFB-188	1968592.4	6760170.8
MAFB-085	1962005	6756015.93	MAFB-189	1960085.96	6760404.65
MAFB-086	1962886	6757167.17	MAFB-199	1964249.02	6756802.59
MAFB-087	1965311.7	6757568.28	MAFB-200	1964550.71	6758038.09
MAFB-088	1966246.1	6758289.9	MAFB-201	1964966.41	6757756.2
MAFB-089	1967395.7	6759242.03	MAFB-202	1965441	6758433.6
MAFB-090	1967733	6758903.3	MAFB-203	1965879.1	6758125.4
MAFB-092	1968781.39	6759998.72	MAFB-204	1965887.4	6757749.71
MAFB-099	1967732.39	6761006.26	MAFB-205	1966386.5	6757557.01
MAFB-101	1967546.39	6759067.41	MAFB-206	1966432.1	6758181.21

Well ID	Northing	Easting	Well ID	Northing	Easting
Groundwater wells owned by the Air Force					
MAFB-102	1966240.4	6758266.3	MAFB-207	1966323.5	6758529.6
MAFB-103	1962882.24	6757149.69	MAFB-208	1965407.7	6758851.2
MAFB-105	1967729.7	6760161.3	MAFB-209	1965678.39	6759048.31
MAFB-107	1969326.3	6767168.8	MAFB-210	1966378.99	6759027.11
MAFB-111	1968326.46	6769538.12	MAFB-211	1967026.5	6757802.22
MAFB-112	1967939.92	6770244.22	MAFB-212	1967711.08	6759408.93
MAFB-113	1967284.37	6770751.6	MAFB-213	1968407.46	6761180.14
MAFB-115	1967722.88	6765748.42	MAFB-214	1968165.96	6761175.74
MAFB-215	1964546.11	6758028.29	MAFB-307	1966836.32	6768484.61
MAFB-216	1964959.3	6757760.8	MAFB-308	1968180	6758815.71
MAFB-217	1965434	6758440	MAFB-314	1968189.78	6758810.58
MAFB-218	1965870.3	6758130.51	MAFB-320	1968189.66	6758810.62
MAFB-219	1965878.6	6757761.31	MAFB-339	1968371.4	6761930
MAFB-220	1966380.7	6757549.61	MAFB-340	1968620.41	6762284.93
MAFB-221	1966621.3	6756939.71	MAFB-343	1968858.41	6761742.34
MAFB-222	1967027.5	6757787.32	MAFB-357D	1968618.58	6762295.77
MAFB-223	1966424	6758187.41	MAFB-357Dd	1968618.58	6762295.77
MAFB-224	1966312.49	6758528.01	MAFB-357Ds	1968618.58	6762295.77
MAFB-225	1965677.49	6759056.81	MAFB-359	1964566.35	6757890.22
MAFB-226	1966328.79	6758968.41	MAFB-360	1965266.59	6756813.85
MAFB-227	1966906.19	6758536.52	MAFB-361	1964640.27	6757226.53
MAFB-228	1967711.78	6759418.93	MAFB-362	1965896.23	6757769.09
MAFB-229	1967728.77	6760150.83	MAFB-363	1966265.78	6757089.72
MAFB-231	1968175.86	6761161.14	MAFB-378B	1969745.523	6759253.554
MAFB-232	1968128.65	6763375.84	MAFB-378D	1969745.523	6759253.554
MAFB-234	1968406.56	6761171.34	MAFB-383B	1960990.587	6755872.265
MAFB-235	1966899.09	6758547.22	MAFB-383D	1960990.587	6755872.265
MAFB-239	1964259.22	6756799.19	MAFB-389	1965560.126	6767016.516
MAFB-240	1966045.11	6756968.31	MAFB-390	1964569.284	6766530.632
MAFB-241	1966377.8	6757560.41	MAFB-397	1969756.61	6759252.31
MAFB-242	1967014.6	6757795.12	MAFB-399	1967969.83	6770261.07
MAFB-243	1966604.4	6756947.01	MAFB-404	1968592.97	6762721.62
MAFB-245	1965819.79	6760026.01	MAFB-405	1968305.07	6762387.83
MAFB-246	1966889.48	6759432.62	MAFB-406	1964581.73	6764776.93
MAFB-247	1964077.44	6758799.99	MAFB-407	1968646.52	6761162.01
MAFB-248	1965815.69	6760019.51	MAFB-409	1964184.56	6763564.07
MAFB-249	1966864.27	6761225.12	MAFB-410	1967343.11	6758946.57
MAFB-250	1968394.86	6761164.94	MAFB-411	1963674.112	6762589.382
MAFB-255	1959181.26	6760577.16	MAFB-413	1959183.445	6760545.839
MAFB-258	1961378.24	6757364.58	MAFB-414	1967740.647	6760026.033
MAFB-264	1966913.84	6758516.42	MAFB-415	1968833.1	6761662.8
MAFB-265	1966883.67	6759422.61	MAFB-417	1965423.6	6758836.6
MAFB-266	1962889.63	6757127.83	MAFB-418	1966103.1	6758314.8
MAFB-275	1965398.98	6762044.85	MAFB-419	1968648.5	6759861.7

Well ID	Northing	Easting	Well ID	Northing	Easting
Groundwater wells owned by the Air Force					
MAFB-276	1966308.7	6764356.24	MAFB-420	1965536.7	6758041.5
MAFB-277	1966065.7	6765522.1	MAFB-421	1967906.4	6761021.9
MAFB-278	1966960.17	6767202.57	MAFB-422	1965954.1	6761405.4
MAFB-282	1968058.21	6762377.76	MAFB-423	1964279	6759819.5
MAFB-283	1959180.75	6760558.8	MAFB-423B	1964279	6759819.5
MAFB-284	1959177.09	6760251.83	MAFB-425	1960878.9	6756794.4
MAFB-288	1967267.92	6770755.89	MAFB-428	1968400.2	6759219
MAFB-289	1968916.47	6768484.2	MAFB-429Bd	1959675.32	6756701.33
MAFB-429Bs	1959675.32	6756701.33	MBS EW4ABu	1966018.87	6758174.3
MAFB-429Bu	1959675.32	6756701.33	MBS EW-4B	1966649.767	6757165.609
MAFB-430	1967691.96	6758192.49	MBS EW-4Bu	1963408.8	6757461.41
MAFB-431Bd	1959745.8	6755962.6	MBS EW-4D	1968811.44	6761333.09
MAFB-431Dd	1959745.3	6755962.6	MBS EW5ABu	1965797.058	6758297.523
MAFB-431Ds	1959745.6	6755963	MBS EW6ABu	1965339.41	6757717.605
MAFB-434Bd	1959165.5	6755918.37	MBS EW7ABu	1968561.16	6761761.68
MAFB-434Bs	1959165.5	6755918.37	MBS EW-7B	1965927.129	6756899.345
MAFB-434Bu	1959165.5	6755918.37	MBS EW-9B	1962836.72	6757068.71
MAFB-439	1968103.5	6759403.5	MBS EW-13BuB	1959832.07	6755979.23
MAFB-440	1961384.8	6760274	MBS IW-501	1968517	6759369
MAFB-440P	1961384.8	6760274.4	MBS IW-502	1968656	6759480
MAFB-441	1964518.6	6760059.5	MBS IW-503	1968741	6759557
MAFB-442	1965515.2	6758896.8	MBS IW-504	1969065.91	6760092.07
MAFB-450	1961000	6755878.3	MBS PZ-01	1965761.09	6757843.71
MAFB-451	1961413.3	6757350.1	MBS PZ-02	1965549	6758002
MAFB-452B	1962291	6757020.1	MBS PZ-03	1966108	6758304
MAFB-452Bu	1962291.5	6757020.1	MBS PZ-04	1965924	6758595
MBS 19EW01	1968218	6758768	MBS PZ-05	1967255	6757483
MBS 19MW01	1968150.06	6758658.1	MBS PZ-06	1967338	6758265
MBS 19MW02	1968095.31	6758577.34	MBS PZ-07	1967703	6759977
MBS 19MW03	1968141.62	6758665.52	MBS PZ-08	1967618	6760554
MBS 19MW04	1968084.04	6758582.83	MBS PZ-09	1968814.66	6761654.49
MBS 39ABuB	1968381.47	6761207.61	MBS PZ-10	1968292	6762120
MBS 39EW01	1968380.163	6761192.438	MBS PZ-12	1968366	6759009
MBS 39EW02	1968370.06	6761193.4	MBS PZ-13	1968467	6759620
MBS 39MW01	1968378.38	6761162.15	MBS PZ-14	1968476	6759631
MBS 39MW02	1968374.62	6761133.12	MBS PZ-15	1968871	6759767
MBS 39MW03	1968364.04	6761151.8	MBS PZ-16	1967984	6760092
MBS 39MW04	1968358.68	6761110.09	MBS PZ-17	1966473	6756802
MBS EW-1A	1968579	6761762	MBS PZ-18	1966907	6757133
MBS EW1ABu	1965079.44	6757906.04	MBS PZ-19	1965165.75	6757595.99
MBS EW-1B	1967165	6757847	MBS PZ-20	1964259	6757393
MBS EW-1Bu	1963049	6756849	MBS PZ-21	1963495	6757322
MBS EW-1D	1968210	6758756	MBS PZ-22	1963419	6756829

Well ID	Northing	Easting	Well ID	Northing	Easting
Groundwater wells owned by the Air Force					
MBS EW-2A	1965833	6758155	MBS PZ-43	1966902.14	6757114.08
MBS EW-2AR	1965819.17	6758168.46	MBS PZ-44	1964765.85	6757918
MBS EW2ABu	1965654.508	6758130.48	MBS PZ-46	1965910.05	6758420.22
MBS EW-2B	1967448	6759969	MBS PZ-47	1965905.31	6758000.48
MBS EW-2Bu	1964885	6757581	MBS PZ-48D	1967364.64	6759042.64
MBS EW-2D	1966658	6756759	MBS PZ-48S	1967364.64	6759042.64
MBS EW-3A	1966056	6757993	MBS PZ-49D	1968931.09	6759553.67
MBS EW-3B	1967525.187	6759064.479	MBS PZ-49S	1968931.09	6759553.67
MBS EW-3Bu	1961955	6755754	MBS PZ-50D	1968765.95	6760236.79
MBS EW-3D	1967624.594	6757875.402	MBS PZ-50S	1968765.95	6760236.79
MBS PZ-51	1967469.44	6758271.804			
MBS PZ-52	1968055.029	6759813.184			
MBS PZ-54	1969001.73	6759506.814			
MBS PZ-55B	1963309.299	6757479.936			
MBS PZ-55Bu	1963309.299	6757479.936			
IRCTS groundwater wells (not owned by Air Force)					
STSW-59	1966423.285	6771298.564	STSW-163	1965800.318	6766697.06
STSW-60	1968914.054	6770460.865	STSW-168	1968058.508	6760895.421
STSW-61	1968480.009	6770663.847	STSW-171	1964923.205	6765581.151
STSW-74	1966405.476	6768414.713	STSW-172	1966426.451	6771280.2
STSW-75	1964936.018	6767557.843	STSW-177	1966939.594	6761198.96
STSW-77	1967560.386	6767488.078	STSW-180	1964268.486	6764163.871
STSW-81	1966109.415	6765968.912	STSW-185	1963458.73	6762701.222
STSW-82	1969351.176	6764970.144	STSW-186	1961029.241	6759832.365
STSW-86	1968344.697	6762398.737	EX-1	1965714	6766712
STSW-105	1968716.983	6763734.124	EX-6	1968466	6770684
STSW-106	1968672.93	6761206.878	EX-7	1968477	6770668
STSW-108	1968704.602	6763735.713	EX-12	1962257	6761049
STSW-158	1968455.363	6770665.416			

* - State Plane coordinates, North American Datum (NAD) 83

Table 5.2D

Vapor Wells located on Parcel A-1*

Well ID	Northing	Easting	Well ID	Northing	Easting
Vapor wells owned by the Air Force					
Vapor wells owned by the Air Force at Site WP-07/FT-11					
7-BV-01	1959315.435	6760266.493	7-HBV-09	1959948.592	6760493.409
7-BV-02	1959459.905	6760322.397	7-HBV-10	1959594.992	6760628.789
7-BV-03	1959597.665	6760336.521	7-HBV-11	1959728.811	6760630.179
7-BV-04	1959744.436	6760329.744	7-HBV-12	1959873.485	6760612.492
7-BV-05	1959913.46	6760300.538	7-HBV-13	1959538.835	6760737.364

Well ID	Northing	Easting	Well ID	Northing	Easting
Vapor wells owned by the Air Force					
Vapor wells owned by the Air Force at Site WP-07/FT-11					
7-BV-06	1960089.418	6760318.095	7-HBV-14	1959674.269	6760728.035
7-BV-07	1959367.208	6760451.594	7-HBV-15	1959802.668	6760761.344
7-BV-08	1959533.525	6760509.646	7-HBV-16	1960150.346	6760539.742
7-BV-09	1959694.703	6760502.42	7-MP-01	1959404.553	6760277.045
7-BV-10	1959804.769	6760506.544	7-MP-02	1959663.634	6760266.531
7-BV-11	1959991.922	6760471.367	7-MP-03	1959995.726	6760262.582
7-BV-12	1960163.9	6760466.5	7-MP-04	1959325.191	6760335.002
7-BV-13	1959256.339	6760599.345	7-MP-05	1959565.918	6760388.347
7-BV-14	1959388.379	6760627.677	7-MP-06	1959758.448	6760386.867
7-BV-15	1959736.472	6760626.959	7-MP-07	1959907.096	6760429.183
7-BV-16	1959865.209	6760608.159	7-MP-08	1959298.92	6760702.422
7-BV-17	1960060.506	6760614.98	7-MP-09	1959600.972	6760633.396
7-BV-18	1959360.514	6760787.461	7-MP-10	1959973.148	6760564.917
7-BV-19	1959552.827	6760737.48	7-MP-11	1960111.256	6760605.177
7-BV-20	1959786.058	6760751.869	7-MP-12	1959664.205	6760726.321
7-BV-21	1959971.629	6760764.505	7-MP-13	1959930.252	6760680.275
7-BV-22	1959325.666	6760977.992	7-MP-14	1959446.873	6760852.669
7-BV-23	1959496.131	6760915.783	7-MP-15	1959794.153	6760871.925
7-BV-24	1959675.478	6760847.771	7-MP-37		
7-BV-25	1959318.811	6760440.832	11-BV-01	1960364	6760274
7-BV-26	1959390.183	6760600.314	11-BV-01S	1960333	6760282
7-BV-27	1959969.612	6760658.342	11-BV-02	1960458	6760472
7-BV-28	1960034.312	6760289.132	11-BV-02S	1960438	6760493
7-DS-01			11-BV-03	1960188	6760486
7-HBV-01	1959326.94	6760325.681	11-BV-04		
7-HBV-02	1959465.804	6760315.14	11-MP-01	1960393	6760312
7-HBV-03	1959605.92	6760332.067	11-MP-02	1960493	6760451
7-HBV-04	1959746.874	6760342.574	11-MP-03	1960263	6760352
7-HBV-05	1959891.52	6760345.644	11-MP-04	1960351.238	6760419.941
7-HBV-06	1959539.84	6760501.855	11-MP-05	1960097.436	6760284.019
7-HBV-07	1959677.673	6760499.882	11-MP-06	1960090.838	6760454.976
7-HBV-08	1959811.328	6760497.375	11-MP-07	1960571.006	6760692.098
Vapor wells owned by the Air Force at Site FT-10C/ST-68**					
10C-SVE-01	1965804.7	6758947.37	EASB-20	1965589	6759061
10C-SVE-02	1965750.38	6758936.22	EASB-21	1965540	6759055
10C-SVE-03	1965766.51	6758921.45	EASB-24	1965574	6759198
10C-SVE-04	1965787.84	6758899.91	EASB-25	1965424	6759138
10C-SVE-05	1965826.09	6758927.08	EASB-27	1965461	6758763
10C-SVE-06	1965737.11	6758950.97	EASB-28	1965294	6758802
10C-SVE-49D	1965765.02	6758928.2	EASB-29D	1965235	6758999
10C-SVE-49S	1965765.37	6758928.17	EASB-29S	1965234	6758996

Well ID	Northing	Easting	Well ID	Northing	Easting
Vapor wells owned by the Air Force					
Vapor wells owned by the Air Force at Site FT-10C/ST-68**					
10C49-MP01	1965755.68	6758861.17	EASB-30	1965766.19	6758977.35
10C49-MP02	1965816.96	6758860.43	EASB-33	1965404	6759241
10C49-MP03	1965832.52	6758958.23	EASB-34	1965282	6759064
10C-MP-43	1965711.73	6758920.87	EASB-35	1965186	6758934
10C-MP-44	1965768.77	6758926.842	EASB-36	1965799	6758994
EASB-01	1965366	6758842	EASB-37	1965195	6759029
EASB-2D	1965412	6758906	EASB-38	1965668	6759050
EASB-2S	1965411	6758902	EASOV-04	1965620	6758985
EASB-03	1965456	6758963	10C49-MP-01		
EASB-04	1965267.97	6758906.74	10C49-MP-02		
EASB-05	1965349.72	6759027.74	10C49-MP-03		
EASB-06	1965739.9	6758993.78	10C-MP-43		
EASB-07	1965452.91	6759174.15	10C-MPMP-44		
EASB-08	1965423	6758853	10C-MP-49		
EASB-09	1965431	6758916	10C68-PW-01A		
EASB-10	1965250	6758882	10C68-PW-01B		
EASB-11	1965444	6759082	10C68-PW-02		
EASB-12	1965666	6759059	10C68-PW-03		
EASB-13	1965480.63	6759044.19	10C68-PW-04		
EASB-14	1965575	6759160	10C68-PW-05		
EASB-15	1965486	6759092	10C68-PW-06		
EASB-16	1965530	6759154	10C68-PW-07		
EASB-17	1965587	6758943	10C68-PW-08		
EASB-19	1965729	6759128			
Vapor wells owned by the Air Force at Site LF-18**					
18-MP-001	1967897	6759234	18-SVE-001	1967668	6759180
18-MP-002	1967830	6759294	18-SVE-002	1967731	6759307
18-MP-002B	1967835	6759299	18-SVE-003	1967612.079	6759179.449
18-MP-003	1967623	6759279	18-SVE-004		
18-MP-004	1967682	6759082	FFS-SVE-18-ES		
18-MP-005	1967524	6759041	FFS-SVE-18-AS		
18-MP-006	1968021	6759310	FFS-SVE-18-BS		
18-MP-007	1967679.09	6759411.49	FFS-SVE-18-CS		
18-MP-008	1967439.056	6759190.152	FFS-SVE-18-ED		
18-MP-009			FFS-SVE-18-AD		
CW-46			FFS-SVE-18-BD		

Well ID	Northing	Easting	Well ID	Northing	Easting
Vapor wells owned by the Air Force					
Vapor wells owned by the Air Force at Site LF-18**					
MW-47			FFS-SVE-18-CD		
MW-48					
Vapor wells owned by the Air Force at Site ST-29 and ST-71					
AD-01	1968737	6759834	BV-11A	1968615	6759852
AD-02	1968689	6759854	BV-12A	1968605	6759777
BD-01	1968729	6759836	BV-13A	1968679	6759912
BD-02	1968702	6759849	BV-14A	1968696	6759855
D-01	968723	759854	V-15A	968817	759833
CD-02	1968708	6759837	BV-16A	1968702	6760009
ED-01			BV-17A	1968639	6759969
ED-02			BV-18A	1968697	6760113
BV-01A	1968530	6759714	BV-19A	1968637	6760038
BV-01B	1968758	6760048	BV-20A	1968575	6760002
BV-02A	1968570	6759663	BV-21A	1968622	6760128
BV-02B	1968785	6759929	BV-22A	1968555	6760065
BV-03A	1968641	6759698	SVP-01	1968749	6759745
BV-03B	1968872	6759910	SVP-02	1968679	6759695
BV-04A	1968713	6759642	SVP-03	1968596	6759729
BV-04B	1968826	6759999	SVP-04	1968555	6759776
BV-05A	1968711	6759743	SVP-05	1968772	6759837
BV-05B	1968727	6759967	SVP-06	1968724	6759920
BV-06A	1968761	6759709	SVP-07	1968648	6759877
BV-07A	1968782	6759772	SVP-08	1968564	6759903
BV-08A	1968542	6759895	SVP-10	1968651	6760016
BV-09A	1968563	6759821	SVP-11	1968575	6760048
BV-10A	1968597	6759939	SVP-12	1968674	6760054
29-PW-01			29-PW-07B		
29-PW-02			MVP-1		
29-PW-03			MVP-1		
29-PW-04			MVP-2		
29-PW-05			MVP-3		
29-PW-06			MVP-4		
29-PW-07A			MVP-5		
Vapor wells owned by the Air Force at Site ST-37, ST-39, and SS-54					
37-SVE-19-A	1968617.072	6761276.934	37-MPMP-05		
37-SVE-1C			37-MPMP-06		
37-SVE-2C			37-MPMP-07		
37-SVE-3B			37-MPMP-08		
37-SVE-4C			37-MPMP-09		
37-SVE-5C			37-MPMP-10		
37-SVE-6C			37-MPMP-11		

Well ID	Northing	Easting	Well ID	Northing	Easting
Vapor wells owned by the Air Force					
Vapor wells owned by the Air Force at Site ST-37, ST-39, and SS-54					
37-SVE-7C			37-PW-01		
37-SVE-8C			37-PW-02		
37-SVE-9C			37-PW-03		
37-SVE-10C			37-PW-04		
37-SVE-11C			37-PW-05		
37-SVE-12C			37-PW-06		
37-SVE-13C			37-PW-07		
37-SVE-14C			37-PW-08		
37-SVE-15B			39-EW-02	1968371.5	6761192.8
37-SVE-16B			39-MW-1	1968379.9	6761161.7
37-SVE-17B			39-SVE-1A		
37-SVE-18A			39-SVE-1B		
37-SVE-19A			39-SVE-1C		
37-SVE-20C			39-SVE-1E		
37-SVE-21A			39-SVE-2A		
37-SVE-22B			39-SVE-2B		
37-MPMP-01			39-SVE-2C		
37-MPMP-02			39-SVE-2E		
37-MPMP-03			37-SVE-9C		
37-MPMP-04			37-SVE-10C		
Vapor wells owned by the Air Force at Site SD-57					
57-MPMP-01	965970	6758366	7-MPMP-01		
57-MPMP-02	1966070	6758245	57-MPMP-02		
57-MPMP-03	1965757	6758231	57-MPMP-03		
57-MPMP-04	1965632	6758111	57-MPMP-04		
57-MPMP-05	1965844	6758475	57-MPMP-05		
57-MPMP-06	1966370	6758412	57-MPMP-06		
57-MPMP-07	1965875	6757965	57-MPMP-07		
57-MPMP-08			57-MPMP-08		
57-SVE-01	1966052	6758317	57-MPMP-09		
57-SVE-02	1965916	6758296	57-MPMP-10		
57-SVE-03	1965795	6758266	57-MPMP-11		
57-SVE-04	1966014	6758190	57-MPMP-12		
57-SVE-05	1966196	6758320	57-MPMP-13		
57-SVE-6			57-MPMP-14		
57-SVE-7			57-PW-01		

Well ID	Northing	Easting	Well ID	Northing	Easting
Vapor wells owned by the Air Force					
Vapor wells owned by the Air Force at Site SD-57					
57-PZ-11			57-PW-02		
57-PZ-12			57-PW-03		
			57-PW-04		
			57-PW-05		
Vapor wells owned by the Air Force at Site SD-59					
59-MP-001	1967929	6760116	59-PW-04		
59-MP-002	1967948	6760191	59-PW-05	1967678.5	6760422.1
59-MP-003	1967888	6760103	59-PW-06	1967523.3	6760454.1
59-MP-004	1968011.39	6760145.19	59-SVED-001	1967935	6760146
59-MP-005	1967843.49	6760242.17	59-SVED-002	1967919	6760177
59-MP-006	1967828.86	6760105.69	59-SVES-001	1967950	6760142
59-MP-007	1967711.27	6760022.54	59-SVES-002	1967906	6760181
59-MP-008	1967605.905	6759984.417	59-SVE-003	1967927.59	6760147.38
59-MP-009	1967675.629	6760314.016	59-SVE-004	1967743.441	6760039.116
59-MP-010	1967807.159	6759974.929	59-SVE-005	1967740.647	6760026.033
59-MP-011			59-SVE-006	1967933.212	6760093.999
59-PW-01			59-SVE-007	1967932.395	6760082.876
59-PW-02			59-SVE-008	1967931.945	6760073.322
59-PW-03					

* - State Plane coordinates, North American Datum (NAD) 83

** Vapor wells at Site 18 and at Site 10C/68 will be decommissioned by the Air Force in 2012

Table 5.2E
Vapor Wells located on Parcel P-2*

Well ID	Northing	Easting	Well ID	Northing	Easting
Vapor wells owned by the Air Force near Site SS-54					
23-MP-010					

* - State Plane coordinates, North American Datum (NAD) 83

5.2.2 Institutional Controls for IRP Sites on, and Groundwater Contamination Underlying or Near Parcels A-, P-1, and P-2

Institutional Controls for selected IRP sites at Mather were established in the associated RODs and clarified or established also in ESD documents issued in 2010 for the Basewide OU ROD and for the Soil OU Sites and Groundwater OU Plumes ROD (see references listed in Section 1.2). ICs for Site LF-03 that extend onto Parcel A-1 were clarified in a technical memorandum in 2009. The descriptions below are summarized or excerpted from the RODs and ESDs.

The Basewide OU ROD (1998) prescribed ICs in the form of deed environmental restrictions as part of the remedy for Sites FT-10C/ST-68, LF-18, and OT-23C. Similarly, the

S&GW ROD provides for LUCs and ICs for areas of the Property underlain by the chlorinated solvent groundwater plumes and Soil OU Sites WP-07/FT-11, ST-37/ST-39/SD-54, SD-57, and SD-59. However, the USEPA and the State each previously raised concern about the lack of detail provided in the Basewide OU and S&GW OU RODs regarding the imposition, implementation, and management of ICs at these sites.

An ESD to the S&GW OU ROD and an ESD to the Basewide ROD were both signed in August 2010, adding land use control (LUC) ICs as well as provided clarification to the ICs prescribed in the original RODs for the groundwater plumes and Soil OU and Basewide OU sites. These ESDs also explain the requirement for property recipients of any property subject to these ICs to enter into a State land-use covenant (SLUC) allowing the State to implement and if necessary enforce the ICs imposed by the ROD and these ESDs.

The ICs include LUCs that will be incorporated in the Deed as grantee covenants and in a SLUC. The SLUC will be signed and recorded within ten (10) days of deed transfer. These restrictive covenants are required at the time of property transfer and may be subsequently modified or removed. The ICs prohibit installation of groundwater wells for purposes other than remediation and monitoring, prohibit interference with the remedy components, and maintain rights of access for the Air Force and regulatory agencies for the purpose of environmental cleanup.

The ESDs also added ICs to prevent unacceptable exposure to VOCs to indoor air at WP-7/FT-11, ST-37/ST-39/SD-54, SD-57, SD-59, FT-10C/ST-68, LF-18, and OT-23C. According to ESDs, evaluation for the contaminants of concern (VOCs) at sites FT-10C/ST-68, LF-18, ST-37/ST-39/SD-54, SD-57, SD-59, OT-23C must take place prior to property transfer. If the site soil gas data demonstrates that all of the soil gas concentrations for each COC are compatible with unrestricted land use, then the United States Air Force (USAF) will not impose ICs. If soil gas data for one or more of these sites indicates an unacceptable risk associated with potential exposure to indoor air, then ICs to protect human health will be applied at the geographic boundaries for these sites as shown in Attachment 1, Figure 4.

One other IC extends onto Parcel A-1 from the adjacent Parcel A-3, associated with a 1000-foot buffer zone around landfill site LF-03 within which land-use changes must be approved by the State.

The following ICs have been or will be established for the Property as part of the selected remedial actions in order for the Air Force to comply with its obligations under CERCLA. The Deed(s) will include the deed covenants described below. For a complete description of the ICs and detailed maps of the geographical areas to which the ICs apply the reader is referred to the RODs and 2010 ESDs. A summary map showing areas with ICs related to soil contamination is presented as Exhibit 1, Figure 4.

Covenants will be included in the Deed to protect the Air Force wells and any associated infrastructure on the Property from destruction or disturbance. Ownership of the wells and associated infrastructure shall be retained by the Air Force, and the Air Force shall retain the right (for itself and regulatory agencies) to access the wells and other equipment for gauging,

sampling, repair, maintenance, or decommissioning (2010 ESD to the ROD for the Groundwater OU).

The Deed or other related property transfer documents will reserve a perpetual and assignable non-exclusive easement to allow continued access for the Air Force (or its designated contactor) and both federal and state regulatory agencies to monitor the effectiveness of cleanup actions, perform CERCLA five-year reviews, and/or take such additional response or corrective action found to be necessary or where such access is necessary to carry out a response or corrective action on adjoining property (both 2010 ESDs include this IC). For any deed (non-Federal entity) or letter of transfer (Federal entity) transferring all or any part of the Property, access for the U.S. Air Force and USEPA will be maintained by substantially the following language incorporated in the Deed:

The United States retains and reserves a perpetual and assignable easement and right of access on, over, and through the Property, to enter upon the Property in any case in which a remedial action or corrective action is found to be necessary on the part of the United States, without regard to whether such remedial action or correction action is on the Property or on adjoining or nearby lands. Such easement and right of access includes, without limitation, the right to perform any environmental investigation, survey, monitoring, sampling, testing, drilling, boring, coring, testpitting, installing monitoring or pumping wells or other treatment facilities, response action, corrective action, or any other action necessary for the United States to meet its responsibilities under applicable laws and as provided for in this instrument. Such easement and right of access shall be binding on the Grantee and its successors and assigns and shall run with the land.

In exercising such easement and right of access, the United States shall provide the Grantee or its successors or assigns, as the case may be, with reasonable notice of its intent to enter upon the Property and exercise its rights under this clause, which notice may be severely curtailed or even eliminated in emergency situations. The United States shall use reasonable means to avoid and to minimize interference with the Grantee's work and the Grantee's successors' and assigns' quiet enjoyment of the Property. At the completion of work, the work site shall be reasonably restored. Such easement and right of access includes the right to obtain and use utility services, including water, gas, electricity, sewer, and communications services available on the Property at a reasonable charge to the United States. Excluding the reasonable charges for such utility services, no fee, charge, or compensation will be due the Grantee, nor its successors and assigns, for the exercise of the easement and right of access hereby retained and reserved by the United States.

In exercising such easement and right of access, neither the Grantee nor its successors and assigns, as the case may be, shall have any claim at law or equity against the United States or any officer or employee of the United States based on actions taken by the United States or its officers, employees, agents, contractors of any tier, or servants pursuant to and in accordance with this clause: Provided, however, that nothing in this paragraph shall be considered as a waiver by the Grantee and its successors and assigns of any remedy available to them under the Federal Tort Claims Act.

For any deed (non-Federal entity) or letter of transfer (Federal entity) transferring all or any part of the Property, access for State of California regulatory agencies to monitor the effectiveness of cleanup actions and perform CERCLA five-year reviews will be maintained (both ESDs include this IC) by substantially the following language incorporated in the Deed:

State Access to Property. The right of access reserved to the United States in subparagraph [insert reference to three preceding paragraphs] above may be exercised by agencies of the United States, including, but not necessarily limited to the USAF and the USEPA Region IX. Further, notice is hereby given that the USEPA Region IX, the USAF, and the State of California have entered into an agreement commonly referred to as a Federal Facility Agreement (FFA); that, pursuant to the FFA, the USAF has a continuing duty to provide access to the property to the State of California; and that, the USAF will extend to the State of California, as necessary, the right to use the access reserved in subparagraph [insert reference to three preceding paragraphs] above. This right of access is for purposes, either on the Property or on adjoining lands, consistent with the Installation Restoration Program of the Grantor or the FFA, if applicable.

Covenants required by CERCLA §120(h)(3)(ii)(II) will be included in the Deed or other related property transfer documents to ensure that any response or corrective actions that are the responsibility of the Air Force for hazardous substances released or disposed of on the subject property prior to the date of the Deed, which are found to be necessary after the date of delivery of the Deed, will be conducted by the United States. The above response assurance by the Air Force does not mean the Air Force will perform or fund any remediation to accommodate a change in land use desired by the Transferee that is inconsistent with any use restrictions or covenants contained in the Deed or other related property transfer documents.

Covenants will be included in the Deed to ensure that environmental investigations and remedial activities will not be disrupted at any time unless approved by the Air Force and federal and state regulatory agencies. Such covenants include, but are not limited to, prohibiting activities that could disrupt any remediation activities or jeopardize the protectiveness of those remedies (required by both 2010 ESDs).

With respect to sites FT-10C/ST-68, LF-18, ST-37/ST-39/SD-54, SD-57, SD-59, (all on Parcel A-1) and OT-23 (ICs on a small part of Parcel P-2 to protect a vapor monitoring well), the following restrictive covenants, as described in the 2010 ESDs to the S&GW OU ROD and Basewide OU ROD, will be incorporated in the Deed in substantially the following language:

The Grantee covenants and agrees for itself and its successors and assigns that it will not engage in, or allow others to engage in, any surface or shallow soil disturbance activities on the Property except in connection with construction that complies with the institutional control that addresses vapor intrusion.

With respect to risks that may be posed via indoor air contaminated by chemicals volatilizing from shallow soil gas (vapor intrusion), the Grantee covenants and agrees for itself and its successors and assigns either to (a) design and construct structures

intended for occupancy within the area depicted on Exhibit ___ [in the geographic area subject to this IC]in a manner that would mitigate unacceptable risk under CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (for example, through installation of a vapor intrusion barrier or gas collection system); or (b) evaluate the potential for unacceptable risk prior to the erection of any new, occupied structure in the same area, and include mitigation of the vapor intrusion in the design/construction of the structure prior to occupancy if an unacceptable risk is posed under CERCLA and the NCP. The Grantee will coordinate any and all evaluation and potential mitigation measures with USEPA and the State.

The Grantee covenants and agrees for itself and its successors and assigns that it will not damage/disturb/tamper with, or allow others to damage/disturb/tamper with, any of the remediation system components including, but not limited to, the extraction and injection systems, treatment systems, conveyance pipes, electrical/gas/fiber optic lines, or monitoring wells on the Property.

The Grantee covenants and agrees for itself and its successors and assigns that it will not engage in, or allow others to engage in, activities that interfere with the effectiveness of any remediation system component on the Property.

The Grantee covenants and agrees for itself and its successors and assigns that it will not engage in, or allow others to engage in, any activities that would limit access for the USAF, the USEPA, and the State, and their respective officials, agents, employees, contractors, and subcontractors to any equipment/facilities/infrastructure associated with the remediation system components used in soil remediation on the Property.

With respect to site WP-7/FT11, the following covenants, as described in the ESD to the S&GW OU ROD, will be incorporated in the Deed in substantially the following language:

Grantee covenants and agrees for itself and its successors and assigns that it will not damage/disturb/penetrate the engineered landfill cap or damage/disturb/tamper with/remove any of the remedial system components associated with the landfill (e.g., containment system, groundwater monitoring system, access roads, settlement monuments, fencing, signage), or impede or impair the landfill remediation activities, or allow others to do so. These components include but are not limited to the components identified in Exhibit__ [include appropriate exhibit depicting protected system(s) in deed]).

Grantee covenants and agrees for itself and its successors and assigns that it will not engage in, or allow others to engage in, activities that interfere with the effectiveness of the landfill cap or any of the remedial system components associated with the landfill.

Grantee covenants and agrees for itself and its successors and assigns that it will not engage in, or allow others to engage in, activities that would limit access for the USAF, the USEPA, and the State, and their respective officials, agents, employees, contractors, and subcontractors to the landfill cap or any of the remedial system

components associated with the landfill, including groundwater and gas monitoring wells, vent wells, settlement monuments, drainage, subdrainage and erosion controls.

The Grantee covenants and agrees for itself and its successors and assigns that it will not use, or allow others to use, the Property within the landfill cap outline and 1000-footbuffer zone for residential purposes (including mobile or modular homes), hospitals for human care, public or private schools for persons under 18 years of age, nursery schools, or for day care centers for children.

The Grantee covenants for itself and its successors and assigns that it will not conduct or allow the conduct of the following activities at landfill WP-07. Any proposed activities must comply with CCR, Title 27, and Section 21190.

- *Construction, grading, removal, trenching, filling, earth movement, mining or planting that would disturb the soil or the landfill cover, (to include the vegetative cap).*
- *Disturbance of any existing or future groundwater or soil vapor monitoring wells or gas vents, or remedial system associated with the landfill.*
- *Disturbance or removal of fencing or signs intended to exclude the public from the landfill.*
- *Surface application of water (i.e. irrigation) that might result in ponding on the cap or erosion sufficient to degrade the cap.*
- *Disturbance of any equipment and systems associated with monitoring and maintenance are settlement monuments that could affect drainage, subdrainage, or erosion controls for the landfill cover.*
- *Activities that would change the land use that has been established for landfill WP-07. The current land use is a closed capped landfill.*
- *Any land use other than a closed, capped landfill.*

Grantee covenants for itself and its successors and assigns that it will obtain approval for any change in land use or site improvements within 1,000 feet of the site WP-07 landfill from the Department of Toxic Substances Control, until and unless it is demonstrated that contamination related to this landfill is no longer a threat to human health and the environment.

The Grantee covenants for itself and its successors and assigns that it will not conduct or allow the conduct of the following activities within 1000 feet of landfill WP-07.

- *Construction of homes, schools, day care facilities, or hospitals. Prior to any construction on the Property, blueprints and other documentation demonstrating compliance with the following requirements of CCR, Title 27, Section 21190 (g), or in accordance with an equivalent design which will prevent gas migration into the building, unless an exemption has been issued shall be submitted to, and approved by, USEPA, the California Department of Toxic Substances Control (DTSC), Central Valley Regional Water Quality*

Control Board (Central Valley Water Board[CVWB]), and the California Integrated Waste Management Board (CIWMB).

- *A geomembrane or equivalent system with low permeability to landfill gas shall be installed between the concrete floor slab of the building and the subgrade;*
- *A permeable layer of open graded material of clean aggregate with a minimum thickness of 12 inches shall be installed between the geomembrane and the subgrade or slab;*
- *A geotextile filter shall be utilized to prevent the introduction of fines into the permeable layer;*
- *Perforated venting pipes shall be installed within the permeable layer and shall be designed to operate without clogging;*
- *The venting pipe shall be constructed with the ability to be connected to induced draft exhaust system;*
- *Automatic methane gas sensors shall be installed within the permeable gas layer and inside the building to trigger an audible alarm when methane gas concentrations are detected;*
- *Periodic methane gas monitoring shall be conducted inside all buildings and underground utilities in accordance with an approved monitoring plan; and*
- *The concentration of methane gas must not exceed 1.25% by volume in air within the structure.*

Grantee covenants for itself and its successors and assigns to prohibit any activities that would limit access to, or be incompatible with effective operation of, the Landfill OU remedial system(s), including but not limited to the components identified in Exhibit__[include appropriate exhibit depicting protected system(s) in deed].

and

The Grantee covenants for itself and its successors and assigns that the owner or occupant will notify the USEPA, DTSC, CVWB, CIWMB, and the USAF of the discovery of any activities interfering with or adversely affecting the landfill cap and associated monitoring systems at landfill WP-07. The Owner or Occupant shall provide the notification in accordance with [refer to section in deed or covenant where contact information for the parties is provided] within seven (7) working days after the discovery of the activity and shall include information regarding the type of activity, date of the activity, and location of the activity on the Property.

With respect to land surface overlying the MB/SAC, Site 7, and Northeast groundwater plumes, the following restrictive covenants will be included in the Deed in substantially the following language, as described in the ESD to the S&GW ROD:

Grantee covenants and agrees for itself and its successors and assigns that it will not conduct, or allow others to conduct, any surface activities that introduce or allow infiltration of water/other fluids into the groundwater (e.g., construction/creation of any groundwater recharge area, percolation ponds, unlined surface impoundments/trenches,

or irrigation for agricultural purposes), without the written approval of the USAF, USEPA, and the State.

Grantee covenants and agrees for itself and its successors and assigns that it will not install wells or extract groundwater, or allow others to install wells or extract groundwater, for any purpose other than remediation or monitoring.

Grantee covenants and agrees for itself and its successors and assigns that it will not damage/disturb/tamper with, or allow others to damage/disturb/tamper with, the remediation system components, including but not limited to the extraction and injection systems, treatment systems, conveyance pipes, electrical, gas, or fiber optic lines, or monitoring wells on the Property.

Grantee covenants and agrees for itself and its successors and assigns that it will not engage in, or allow others to engage in, activities that interfere with the effectiveness of any remediation system component on the Property.

Grantee covenants and agrees for itself and its successors and assigns that it will not engage in, or allow others to engage in, activities that would limit access for the USAF, the USEPA, and the State, and their respective officials, agents, employees, contractors and subcontractors to any equipment/facilities/infrastructure associated with the remediation system component used in groundwater remediation on the Property.

The Supplemental Basewide OU ROD established institutional controls as the remedy for Site OT-89, and contains the following description:

Institutional controls expressly prohibiting activities inconsistent with the remedial action objectives of this ROD will include restrictions to prevent exposure to contaminated soil, and to ensure soil is not disturbed without ensuring protection of human health and the environment. ICs will be maintained for Site OT-89 as long as soil contaminants are at levels that preclude unrestricted use and exposure. For any deed transferring all or part of the Southwest institutional control area (Figure 10), the following land use restrictions will be incorporated in the deed as grantee covenants, in substantially the following language:

- Residential Development: *Grantee covenants for itself and its successors and assigns that it will not use, or allow others to use the designated Site OT-89 area for residential development, or construction of schools, day care facilities for children, or hospitals for human care, and that any uses of the site that would allow exposure to the buried contaminated soils by the public will be prohibited.*
- Disturbance of Soil. *Grantee covenants for itself and its successors and assigns that it will not disturb or allow others to disturb the soil where it may contain elevated lead concentrations (Figure 2-8), without prior approval from the ROD signatory agencies to ensure that the activity will not compromise protection of human health and the environment. This includes any activities that would alter drainage, or sub-drainage, in the area.*

The deed will also include a condition that the transferee execute and record a State Land Use Covenant (SLUC), within 10 days of transfer, to address any State obligations pursuant to State law, including 22 Code of California Regulations, Section 67391.1.

In addition to the ICs described above, there is an additional safeguard against exposure to contaminated groundwater or interference with groundwater cleanup. The area of the Property within 2000 feet of known groundwater contamination is subject to the Consultation Zone requirements of Sacramento County Code, Title 6, Section 6.28.000(G). Any application for a well permit within 2000 feet of a known groundwater contaminant plume is subject to special review by appropriate regulatory agencies, including, but not limited to the Sacramento County Environmental Management Department (SCEMD) and the CVWB to evaluate potential impacts to public health and groundwater quality.

5.3 Petroleum Products and Derivatives

Petroleum-contaminated sites are present on the Property (Parcel A-1). The closed IRP sites where petroleum contamination occurred are WP-19, ST-36, ST-38, SD-62, and ST-79. The petroleum-contaminated sites undergoing remediation include IRP Sites FT-10C, ST-29, ST-37, ST-39, SS-54, SD-57, SD-59, ST-68, and ST-71. Sites WP-19, ST-29, ST-36, and ST-71 were determined in the 1996 in the S&GW OU ROD to be petroleum-only sites exempt from CERCLA but for which cleanup would be required under State regulations. Remedial action that includes SVE and groundwater monitoring is ongoing for the non-CERCLA sites ST-29 and ST-71 under the California Underground Storage Tank (UST) Program. Additional non-IRP petroleum-contaminated sites are described in the Section 5.4. The remedial actions in progress to close CERCLA petroleum-contaminated sites are described in Table 5.2A. Refer to Sections 5.2, 5.4 and 5.5 for additional information related to these petroleum contaminated sites.

5.4 Underground/Aboveground Storage Tanks (USTs/ASTs)

Table 5.4a lists the eighty-seven USTs that were located within the Property. All were located on Parcel A-1; there were no USTs on Parcels P-1 or P-2. All of the USTs on the Property have been removed and the sites have received regulatory closure or are undergoing remediation as described below. The Air Force has taken the necessary steps, including sampling where appropriate, to remove and remediate all USTs and ASTs as appropriate. The Air Force has also closed out all permits associated with these units. All USTs on the Property have been removed. Twenty-four ASTs remain on the Property.

A number of UST sites are currently being remediated as part of IRP sites Tanks/Locations 3167, 3273, 3389, 4305, 4316, and 4318, with corresponding IRP sites are listed in Table 5.4A. USTs 7080, and 7090 have been remediated as part of Site FT-10C/ST-68, and a closure report submitted. Concurrence with closure that includes ICs to address future buildings has been received from the State, and concurrence is expected in August 2011 from USEPA. A summary of cleanup at these IRP sites is presented in Table 5.2A. Deed covenants associated with these IRP sites are provided in Sections 5.2 and 5.3. There is no evidence of release to the environment from the ASTs that remain on the Property. The Transferee will be responsible for complying with all applicable federal, state, and local laws and regulations

relating to the use of the tanks left in place. The Transferee will also assume all liability for any leaks associated with these tanks after the date of transfer as a condition of receiving the tank in lieu of their removal.

Table 5.4A
Underground Storage Tanks Formerly Located on Parcel A-1 (There were no USTs on Parcels P-1 or P-2)

Table 5.2A: Underground Storage Tanks Formerly Located on Parcel A-1					
Tank ID	**Capacity (Gal)**	**Former Contents**	**Associated IRP Site**	**Tank Status/Year Removed**	**Closure Status (Agency)**
3167A	10,000	Gasoline/Diesel	ST-29[1]	Removed/1994	Non-CERCLA soil remediation (SVE/ Bioventing) in progress
3167B	10,000	Gasoline /Diesel	ST-29[1]	Removed/1994	Non-CERCLA soil remediation (SVE/ Bioventing) in progress
3167C	10,000	Gasoline/Diesel	ST-29[1]	Removed/1994	Non-CERCLA soil remediation (SVE/ Bioventing) in progress
3167D (Second set of tanks removed from 3167)	10,000	Gasoline/Diesel	ST-29[1]	Removed/1994	Non-CERCLA soil remediation (SVE/ Bioventing) in progress
3273A[3]	25,000	Aviation Gas (AVGAS)/Diesel	ST-71[1]	Removed/1988	Non-CERCLA soil remediation (SVE/ Bioventing) in progress
3273B	25,000	AVGAS/Diesel	ST-71[1]	Removed/1993	Non-CERCLA soil remediation (SVE/ Bioventing) in progress
3273C	25,000	AVGAS/Diesel	ST-71[1]	Removed/1993	Non-CERCLA soil remediation (SVE/ Bioventing) in progress
3273D	25,000	AVGAS/Diesel	ST-71[1]	Removed/1988	Non-CERCLA soil remediation (SVE/ Bioventing) in progress
3273E	550	Waste fuel	ST-71[1]	Removed/1993	NFA 10/08/1996 (SCEMD); 02/22/2002 (CVWB)
3286A	25,000	AVGAS/gasoline	ST-36[1]	Removed/1989	Closed 2/18/2005 (CVWB)

Table 5.2A: Underground Storage Tanks Formerly Located on Parcel A-1					
Tank ID	**Capacity (Gal)**	**Former Contents**	**Associated IRP Site**	**Tank Status/Year Removed**	**Closure Status (Agency)**
3286B	25,000	AVGAS/gasoline	ST-36[1]	Removed/1989	Closed 2/18/2005 (CVWB)
3286C	25,000	AVGAS/gasoline	ST-36[1]	Removed/1989	Closed 2/18/2005 (CVWB)
3286D	25,000	AVGAS/gasoline	ST-36[1]	Removed/1989	Closed 2/18/2005 (CVWB)
3388A	5,000	Gasoline	ST-38[2]	Removed/1988	NFA *Soil OU ROD* and 11/07/2001 (CVWB)
3388B	5,000	Diesel	ST-38	Removed/1988	NFA *Soil OU ROD* and 11/07/2001 (CVWB)
3389A	550	Kerosene/solvent	ST-37	Removed/1993	Soil Remediation (SVE) in progress
3389B	12,000	AVGAS/Diesel	ST-37	Removed/1988	Soil Remediation (SVE) in progress
3389C	12,000	AVGAS/Diesel	ST-37	Removed/1988	Soil Remediation (SVE) in progress
3389D	12,000	AVGAS/Diesel	ST-37	Removed/1988	Soil Remediation (SVE) in progress
3389E	12,000	AVGAS/Diesel	ST-37	Removed/1988	Soil Remediation (SVE) in progress
4001	100	Jet Propulsion Fuel, Type 4 (JP-4) Condensate	WP-19	Removed/1998	Closed 02/22/2002 (CVWB)
4015	500	Waste Fuel	WP-19	Removed/1994	Closed 02/22/2002 (CVWB)
4145	550	Diesel	NA	Removed/1987	Closed 10/08/1996 (SCEMD)[3];
4150	6,911	Diesel	NA	Removed/1987	Closed 10/08/1996 (SCEMD)[3];
4225A	288	Waste Fuel/solvent	NA	Removed/1994	Closed 08/07/1996 (SCEMD)[3]
4225B	193	Waste Fuel	NA	Removed/1994	Closed 07/08/1996 (SCEMD)[3]
4305A	25,000	Waste Fuel/ AVGAS	ST-39	Removed/1993	Remediation (SVE) in progress
4305B	25,000	Waste Oil/	ST-39	Removed/1993	Remediation (SVE) in

Table 5.2A: Underground Storage Tanks Formerly Located on Parcel A-1					
Tank ID	**Capacity (Gal)**	**Former Contents**	**Associated IRP Site**	**Tank Status/Year Removed**	**Closure Status (Agency)**
		AVGAS			progress
4305C	25,000	AVGAS	ST-39	Removed/1993	Remediation (SVE) in progress
4305D	25,000	AVGAS	ST-39	Removed/1993	Remediation (SVE) in progress
4305E	25,000	AVGAS	ST-39	Removed/1993	Remediation (SVE) in progress
4305F	25,000	AVGAS	ST-39	Removed/1993	Remediation (SVE) in progress
4305G	25,000	AVGAS	ST-39	Removed/1993	Remediation (SVE) in progress
4305H	25,000	Waste/ AVGAS	ST-39	Removed/1993	Remediation (SVE) in progress
4316A	500	AVGAS	ST-39	Removed/1995	Remediation (SVE) in progress
4316B	500	AVGAS	ST-39	Removed/1995	Remediation (SVE) in progress
4318A	500	AVGAS	ST-39	Removed/1995	Remediation (SVE) in progress
4318B	500	AVGAS	ST-39	Removed/1995	Remediation (SVE) in progress
4318C	500	AVGAS	ST-39	Removed/1995	Remediation (SVE) in progress
4540	1,000	Diesel	ST-79	Removed/1997	Closed 06/17/1997 and 06/15/1998 (SCEMD)[3]; 05/15/1998 (CVWB)
4587	1,000	Diesel	NA	Removed/1994	Closed 01/19/1996 and 07/08/1996 (SCEMD)[3]
4588	250	Diesel	NA	Removed/1987	Closed 01/19/1996 (SCEMD)[3]
7003	3,600	Ammonia	ST-45[2]	Removed/1989	Closed 01/22/1991 (SCEMD)[3]and NFA in *Soil OU ROD*
7010	3,300	Diesel	NA	Removed/1994	Closed 07/08/1996 (SCEMD)[3]

Table 5.2A: Underground Storage Tanks Formerly Located on Parcel A-1					
Tank ID	**Capacity (Gal)**	**Former Contents**	**Associated IRP Site**	**Tank Status/Year Removed**	**Closure Status (Agency)**
7013	550	Diesel	NA	Removed/1987	Closed 10/08/1996 (SCEMD)[3];
7014	550	Diesel	NA	Removed/1987	Closed 10/08/1996 (SCEMD)[3];
7022A	2,000	Gasoline	NA	Removed/1994	Closed 08/07/1996 (SCEMD)[3]
7022B	2,000	Diesel	NA	Removed/1994	Closed 08/07/1996 (SCEMD)[3]
7022C	2,000	Diesel	NA	Removed/1994	Closed 08/07/1996 (SCEMD)[3]
7032	550	Diesel	NA	Removed/1988	Closed 10/08/1996 (SCEMD)[3];
7033	2,000	Diesel	NA	Removed/1994	Closed 08/07/1996 (SCEMD)[3]
7035	5,000	Diesel	NA	Removed/1987	Closed 10/08/1996 (SCEMD)[3];
7039	940	Waste oil	NA	Removed/1994	Closed 08/07/1996 (SCEMD)[3]
7080A	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close with institutional controls
7080B	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7080C	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7080D	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7080E	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7080F	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7080G	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions

Table 5.2A: Underground Storage Tanks Formerly Located on Parcel A-1					
Tank ID	**Capacity (Gal)**	**Former Contents**	**Associated IRP Site**	**Tank Status/Year Removed**	**Closure Status (Agency)**
7080H	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7080I	2,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7090A	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7090B	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7090C	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7090D	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7090E	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7090F	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7090G	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7090H	50,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7090I	2,000	JP-4	ST-68	Removed/1994	Closure report issued May 2010 to close w/restrictions
7095	200	JP-4 condensate	NA	Removed/1998	Closed 12/09/1999 (SCEMD)[3]; 1/31/2000 (CVWB)
7100	550	For waste oil collection at skimmer (reportedly never used)	NA	Removed/1994	Closed 10/08/1996 (SCEMD)[3]; 02/22/2002 (CVWB)
8150	2,000	Diesel	NA	Removed/1994	Closed 08/07/1996 (SCEMD)[3]
8157	1,000	Diesel	NA	Removed/1993	Closed 06/27/1996 or 06/28/1996 (SCEMD)[3]
8158	250	Diesel	ST-46[2]	Removed/1993	NFA in Soil OU ROD; 06/27/1996 (SCEMD)[3]

Table 5.2A: Underground Storage Tanks Formerly Located on Parcel A-1					
Tank ID	**Capacity (Gal)**	**Former Contents**	**Associated IRP Site**	**Tank Status/Year Removed**	**Closure Status (Agency)**
8195	1,000	Diesel	NA	Removed/1998	Closed 01/31/2000 (CVWB)
10015	1,000	Diesel	ST-73[2]	Removed/1993	Closed 06/27/1996 (SCEMD)[3]
10030	275	Diesel	ST-51[2]	Removed/1993	Closed 06/27/1996 (SCEMD)[3]
10052	1,000	Diesel	NA	Removed/1997	Closed 06/24/1998 (SCEMD)[3]
10065	1,000	Diesel	ST-74[2]	Removed/1993	NFA in *Soil OU ROD*; 06/27/1996 (SCEMD)[3]
10072	250	Gasoline	ST-26[1]	Removed/1988	Closed 11/07/2001 (CVWB)
10075	1,000	Diesel	NA	Removed/1988	Closed 11/07/2001 (CVWB)
10080	1,240	Diesel	NA	Removed/1988	Closed 02/16/2000 (SCEMD)
10085	1,065	Diesel	NA	Removed/1988	Closed 02/16/2000 (SCEMD)
10087	500	Gasoline	NA	Removed/1998	Closed 01/31/2000 (CVWB)

Footnotes:
[1] - NFA site under CERCLA because of the petroleum exclusion (see *Soil OU Sites and Groundwater OU Plumes ROD*). Site is to be closed by SCEMD or CVWB.
[2] - The Superfund Record of Decision (ROD) signed in June 1996 for the *Soil OU Sites and Groundwater OU Plumes* closed this as an IRP site.
[3] - Tanks were clean closed by the Sacramento County Environmental Management Department (SCEMD).

Table 5.4B
List of ASTs Located, or Formerly Located, on Parcels A-1, P-1 and P-2

Above-ground Storage Tanks Located or Formerly Located on Parcel A-1					
Tank/ Location	**Purpose**	**Capacity (Gallons)**	**Former Contents**	**Associated IRP Site**	**Tank Status/ Date Removed**
3281	Sewage lift station's backup power building	25	Diesel	NA	Active Tank
3281	Sewage lift station's backup power building	250	Diesel	NA	Active Tank
4005	Aircraft bulk jet fuel storage	840K	JP-4	NA	Active tank*
4020	Aircraft bulk jet fuel	420K	JP-4	NA	Active tank*

Above-ground Storage Tanks Located or Formerly Located on Parcel A-1					
Tank/ Location	**Purpose**	**Capacity (Gallons)**	**Former Contents**	**Associated IRP Site**	**Tank Status/ Date Removed**
	storage				
4130	Test Cell fuel storage	2,700	JP-4	NA	Removed/1996
4145	Hangar deluge system emergency generator	200	Diesel	NA	Active Tank
4145	Hangar deluge system emergency generator	200	Diesel	NA	Active Tank
4145	Hangar deluge system emergency generator	200	Diesel	NA	Active Tank
4145	Hangar deluge system emergency generator	200	Diesel	NA	Active Tank
4249	Compressed air plant	1000	Aircraft soap	NA	Inactive
4348	Aerospace ground equipment (AGE) fuel storage	200	Motor gasoline (MOGAS)	NA	Removed/1996
4348	Aerospace ground equipment (AGE) fuel storage	500	JP-4	NA	Removed/1996
4348	Aerospace ground equipment (AGE) fuel storage	450	JP-4	NA	Removed/1996
4348	Aerospace ground equipment (AGE) fuel storage	1,500	Diesel	NA	Removed/1996
4587	Communications emergency power generator	30	Diesel	NA	Removed/1996
7007	Electric power station	50	Diesel	NA	Removed
7015	Maintenance hangar	500	Waste oil	NA	Removed
7032	Command Post emergency power generator	560	Diesel	NA	Removed/1996
7032	Command Post emergency power generator	87	Diesel	NA	Removed/1996
7040	Maintenance dock emergency power generator	15	Diesel	NA	Removed/1996
7045	Former Aircraft Maintenance Shop	50	Diesel	NA	Removed
7075	Fire station emergency power generator	300	Diesel	NA	Emptied & cleaned
7075	Fire station emergency power generator	50	Diesel	NA	Emptied & cleaned
7078	Demineralized water plant storage	300	Diesel	NA	Removed/1996
7080	Jet fuel pumping station emergency generator	300	Diesel	NA	Removed/1996
7080	Fuel tank vapor incinerator heating	1,000	Propane	NA	Removed/1996
7080	Fuel tank vapor incinerator heating	1,000	Propane	NA	Removed/1996
7090	Jet fuel pumping station	300	Diesel	NA	Removed/1996

Above-ground Storage Tanks Located or Formerly Located on Parcel A-1					
Tank/ Location	**Purpose**	**Capacity (Gallons)**	**Former Contents**	**Associated IRP Site**	**Tank Status/ Date Removed**
	emergency generator				
7099	Test cell facility heating	289	Propane	NA	Removed/1996
7125	Sewer lift station	500	Diesel	ST-20	Removed by Airport
7300	Fire training area	500	JP-4	FT-11	Removed/1996
7300	Fire training area	500	JP-4	FT-11	Removed/1996
8150	Bomber alert area facility heating	1,000	Propane	NA	Emptied
8151	Alert facility emergency power generator	1,365	Diesel	NA	Removed/1996
8151	Alert facility emergency power generator	80	Diesel	NA	Removed/1996
8157	Alert facility emergency power generator	50	Diesel	NA	Removed/1996
8158	Bomber alert area facility heating	499	Propane	NA	Emptied
10015	ILS glide slope emergency power generator	1,134	Diesel	NA	Emptied & cleaned
10015	ILS glide slope emergency power generator	25	Diesel	NA	Emptied & cleaned
10030	ILS glide slope emergency power generator	50	Diesel	NA	Emptied & cleaned
10063	Airport Control Tower	1000	Diesel	NA	Active
10065	Utility vault emergency power generator	2,000	Diesel	NA	Emptied & cleaned
10065	Utility vault emergency power generator	107	Diesel	NA	Emptied & cleaned
10072	ILS localizer emergency power generator	50	Diesel	NA	Emptied & cleaned
10075	TACAN station emergency power generator	350	Diesel	NA	Removed/unknown
10075	TACAN station emergency power generator	50	Diesel	NA	Emptied & cleaned
10085	ILS localizer emergency power generator	550	Diesel	NA	Emptied & cleaned
10085	ILS localizer emergency power generator	25	Diesel	NA	Emptied & cleaned

* In use by a County sublessee

Above-ground Storage Tanks Located on Parcel P-1					
Tank/ Location	**Purpose**	**Size (Gallons)**	**Former Contents**	**Associated IRP Site**	**Closure Status***
7051	Truck maintenance	600	Waste fuel	NA	Removed
7052	Vehicle maintenance	1,000	Antifreeze	NA	Removed
7052	Vehicle maintenance	Approx. 100	unknown	NA	Inactive

*No state or county requirements for closure

Above-ground Storage Tanks Formerly Located on Parcel P-2					
Tank/ Location	**Purpose**	**Size (Gal)**	**Former Contents**	**Associated IRP Site**	**Closure Status***
3695	Generator	2000	Diesel	NA	Tank removed

The Transferee will be responsible for complying with all applicable federal, state, and local laws and regulations relating to the use of these tanks. The Transferee will also assume all liability for any leaks associated with these tanks after the date of transfer as a condition of receiving these tanks in lieu of their removal.

5.5 Oil/Water Separators (OWSs)

There were sixteen OWSs located on the Property. All of these OWSs have been cleaned, removed, and remediated except for (a) five OWSs that were cleaned and left in place after the sites were closed (4120, 6905, 6910, 7038, and 7039), (b) two active OWSs that were transferred to Sacramento County (7049 and 7054), (c) 7100 which reportedly was never used, and (d) two OWSs for which the historical usage is unknown (7310 [2]). Table 5.5 provides additional information about the OWSs.

Table 5.5
Status Summary of Oil/Water Separators at Parcels A-1 and P-1 (none on P-2)

Oil/Water Separators Located on Parcel A-1				
Facility ID	**Capacity (Gal)**	**Associated IRP Site**	**OWS Status/Year Removed**	**Closure Status (Agency)**
3990	10,000	SD-13	Removed/prior to 1995	RAR concurrence 2000 (USEPA)
4120	1,200	SD-64	Cleaned, Decontaminated, and sampled /1995; closed in place; currently inactive	NFA--*Soil OU Sites ROD*
4251	8,500	SD-59	Removed/1996	SVE in place in 2000 per ROD ESD for IRP Site SD-59
6900	650	SD-60	Removed/1996	RAR concurrence 2002 (USEPA and DTSC)
6905	650	SD-61	Closed in place; currently inactive	NFA--*Soil OU Sites ROD*
6910	1,200	SD-65	Closed in place; currently inactive	RAR concurrence 2000 (USEPA, DTSC, and CVWB)
6915	1,200	SD-66	Removed/1996	NFA--*Soil OU Sites ROD*
7019	8,500	SD-57	Removed/1995	SVE in place
7038**	13,600	SD-55	Cleaned, decontaminated and sampled/1995; closed in place; currently inactive	NFA--*Soil OU Sites ROD*
7039	1,000	SD-15	Cleaned,	RAR concurrence 2001 (USEPA)

Oil/Water Separators Located on Parcel A-1				
Facility ID	**Capacity (Gal)**	**Associated IRP Site**	**OWS Status/Year Removed**	**Closure Status (Agency)**
			decontaminated and sampled/1995; closed in place; currently inactive	
7054	unknown		Transferred to Sacramento County/Active	NA
7100	36,000		Cleaned, decontaminated and sampled/1995; closed in place	Inactive. The 1996 RCRA closure report indicated that this unit was never used and there was no contamination found during sampling, therefore NFA *
7110	1,500	OT-62	Removed mid-1990's	RAR concurrence 2001 (USEPA)
7310	1,000	Located north of FT-11	Cleaned and sampled /1995; closed in place	Inactive. The 1996 RCRA closure report states that this is an aboveground unit, and there was no contamination found during sampling, therefore NFA.*
7310	Unknown	Located north of FT-11	Cleaned and sampled /1995; closed in place	Inactive. The 1996 RCRA closure report states that this is an aboveground unit, and there was no contamination found during sampling, therefore NFA.*

**Final OWS Removal and RCRA Hazardous Waste Facility Closure Report*, Ogden 1996.
***OWS 7038 has been approved by AFRPA for demolition by the Sacramento County Airport System*

Oil/Water Separators Located on Parcel P-1				
Facility ID	**Capacity (Gal)**	**Associated IRP Site**	**OWS Status/Year Removed**	**Closure Status (Agency)**
7049	1,000		Transferred to Sacramento County/Active	NA

The Transferee will be responsible for complying with all applicable federal, state, and local laws and regulations relating to the use of these OWS. The Transferee will also assume all liability for any leaks associated with these OWS after the date of transfer as a condition of receiving these tanks in lieu of their removal.

5.6 Military Munitions: Unexploded Ordnance (UXO), Discarded Military Munitions (DMM), Waste Military Munitions (WMM), Explosive Soils, Explosive Debris, and/or Munitions Constituents (MC)

Three munitions-related sites were formerly located on the property as depicted in Figure 4 in Attachment 8 of the SEBS. One site and one area of concern (AOC) were investigated and their closure documented under the Military Munitions Response Program (MMRP): *Site XU403, Mather Practice Bombing Range and AOC 596, Small Arms Firing Range near Site OT-89.* One site was investigated and closure was documented under the IRP: Site OT-89, Old Skeet Range.

5.6.1 MMRP Site XU403, Mather Practice Bombing Range: The Air Force has identified the Mather Practice Bombing Range as a Munitions Response Site (MRS). Historical records indicate that Mather was used for aerial gunnery and practice bombing activities at various times between 1918 and 1940. Not all of the Property was a part of the former Mather AFB at the time of the practice bombing; and there are no records to suggest that the practice bombing was ever conducted in areas that were not part of the base. However, a 1937 aerial photograph and other historical records indicate that a bombing target was within a 787-acre practice bombing range located in the northwest portion of Mather that includes a majority of the current runway 22R and the central portion of runway 22L. Extensive records research demonstrated that no live ordnance was ever used at Mather's practice bombing range. No geophysical or other field investigations for munitions and explosives of concern (MEC) related to the practice bombing range has been conducted and none are planned. However, Site XU403 has been the subject of an extensive historical records search to assess potential explosive safety risks. Based on this research and assessment, a No Further Action (NFA) Explosive Safety Submission (ESS) was submitted to the Air Force Safety Center (AFSC) in November 2009. In December 2009, the Department of Defense Explosives Safety Board (DDESB) approved the NFA ESS for Site XU403. Copies of the NFA ESS, Air Force transmittal letters, and DDESB approval letter are provided in Attachment 5.

The NFA ESS requires a 3,000-foot practice bomb target safety zone (approximately 621 acres) to support the closure of Site XU403. The safety zone lies within the airport Parcel A, around the location of the only known practice bomb target at Mather. The purpose of the safety zone is to define an adequate boundary within which current and future land owners should be notified of the site's historical use as a practice bombing range. Attachment 5, Figure 1-5 depicts the 3,000-foot safety zone established for Site XU403 and its relation to Parcel A-1.

No land-use restrictions are necessary for XU-403 as there is no evidence that live ordnance was used during practice bomb practice, but notification will be provided for property within 3000 feet of the only known practice bombing target as described in the NFA ESS. An initial notification to the airport tenant is described below.

Some of the practice bombs used at Mather contained a small black powder explosive spotting charge and while there is no evidence to indicate live demolition bombs were ever used at Mather Field, there is still the possibility that munitions with this spotting charge could be discovered on the Property. In the event that any metal object resembling military munitions, or a fragment thereof, is found, the item should not be touched or disturbed further and the local police or fire department should be contacted to report the finding. These recommendations were provided to Sacramento County and other stakeholders on May 3, 2010. A copy of the letter to stakeholders is provided in Appendix 5. Site XU403 was closed under the MMRP in July 2010.

5.6.2 MMRP Site AOC 596, Small Arms Firing Range: This area of concern appeared as an area with berms in an old aerial photograph and was tentatively identified as a small arms practice range with the berms possibly used as backstops behind targets on the range between 1947 and 1957. Since the 1950s, extensive reworking of the soils in this area has occurred and the bermed area is gone. It may have been demolished, removed, and/or covered

with as much as 10 feet of fill material. Munitions associated with small arms pose no explosive safety risk; therefore, Site AOC 596 is excluded from the explosive safety closure requirements. There was no physical evidence of any remaining range area when nearby Site OT-89 was identified and the potential range area was not investigated during the Site OT-89 investigation. In December 2007, ten surface soil samples were collected near the suspected location of the former small arms range berm. All samples were analyzed for lead concentrations. No lead contamination was detected and the site was closed under the MMRP in October 2008. No ICs or notifications are required for AOC 596.

5.6.3 IRP Site OT-89, Old Skeet Range: This site was a known trap and skeet range where a removal action involving excavation of lead in soil was completed. Munitions associated with small arms pose no explosive safety risk; therefore, Site AOC 596 is excluded from the explosive safety closure requirements. The site was closed with institutional controls (land-use restrictions) in the *Supplemental Basewide Sites OU ROD* (AFRPA, 2006). Refer to Section 5.2.2 for additional information.

Covenants will be included in the Deed to ensure that any response or corrective actions that are the responsibility of the Air Force for military munitions substances released or disposed of on the property prior to the date of the Deed which are found to be necessary after the date of delivery of the Deed will be conducted by the United States. Provisions will also be included in the Deed to allow the United States access to the Property in any case where any such response or corrective action is found to be necessary, or where such access is necessary to carry out any response or corrective action on adjoining property. The above response assurance by the Air Force does not mean the Air Force will perform or fund any remediation to accommodate a change in land use desired by the Transferee that is inconsistent with any use restrictions or covenants contained in the Deed or other related property transaction documents.

5.7 Radioactive and Mixed Waste

Radioactive waste is reportedly present on the Property at Site RW-16, Radioactive Waste (RW) Electron Tube Burial Site under Facility 8170. Approximately sixty low-level radioactive electron tubes were reportedly placed inside one-gallon containers, encased in concrete and buried in 15-foot auger holes. Investigations revealed no radiation at the surface above background levels, nor in water from a nearby groundwater monitoring well. Inspection after demolition of Building 8170 revealed no evidence of the reported burial. The Soil OU ROD concluded that there is no significant health risk associated with exposure to the intact concrete containing the electron tubes and it is possible that the electron tubes themselves do not represent a significant health risk. However, as the type of electron tubes was not documented, the Deed will provide notice to the Property recipients that any excavation at the site should proceed with caution to avoid inadvertent exposure to broken concrete containers and/or electron tubes.

Covenants required by CERCLA §120(h)(3)(ii)(II) will be included in the Deed or other related property transfer documents to ensure that any response or corrective actions that are the responsibility of the Air Force for hazardous substances released or disposed of on the subject property prior to the date of the Deed, which are found to be necessary after the date of delivery of the Deed, will be conducted by the United States. The above response assurance by the Air

Force does not mean the Air Force will perform or fund any remediation to accommodate a change in land use desired by the Transferee that is inconsistent with any use restrictions or covenants contained in the Deed or other related property transfer documents.

5.8 Asbestos-Containing Material (ACM)

The subject property contains ACM, as described below. The Deed will contain the notifications described below**.**

5.8.1 ACM in Structures or Buildings: An asbestos survey of Mather AFB facilities was conducted in 1990. The results are within a comprehensive report prepared by EG&G Idaho, Inc. The report, the Mather AFB Asbestos Survey Report, is maintained by the AFRPA Western Region Execution Center at the former McClellan AFB.

5.8.2 Friable Asbestos: All friable asbestos identified prior to the 1994 Airport Lease was abated by the Air Force. According to the lease, the lessee is responsible for maintaining the facilities including ACM. Based on the VSIs and a review of the Basewide EBS, the ACM located in some structures on the Property is in poor condition and may be damaged or deteriorated to the extent that it creates a potential source of airborne fibers. Covenants will be included in the Deed restricting occupancy to a facility prior to repairing or removing the ACM.

5.8.3 ACM in Utility Pipelines: No CERCLA response action for ACM in belowground utility pipelines is required. ACM, such as transite pipes or pipes wrapped with asbestos insulation, may be found in (or on) utility pipelines located on the property. ACM associated with utility pipelines below ground does not pose a threat to human health or environment as long as it is not disturbed, or, if it is disturbed, proper care is taken to manage and dispose of it. Utility pipelines below the ground have not been inspected. The Transferee and subsequent transferees will be given notice of the possibility of ACM in utility pipelines through a notice in the Deed. The Deed will provide notice to the Transferee that the Air Force will not be responsible for the remediation of ACM in below-ground utility pipelines.

5.8.4 ACM in Demolition Debris: ACM, which was commonly used in building materials, may be located at building demolition locations. Based upon an inspection of the property and a review of the EBS reports, no locations where ACM from building demolition remains in the soil or in buried demolition debris are specifically known on the subject property. No CERCLA response action is required at this time. However, it is possible that there are undiscovered locations where demolition debris may be found by the Transferee or subsequent transferees during ground disturbance activities. The Transferee and subsequent transferees will be cautioned by notice in the Deed to exercise care during ground disturbing activities. The Transferee or subsequent transferees will be required to notify the Air Force promptly of any demolition debris containing friable asbestos and believed to be associated with Air Force activities. The Transferee or subsequent transferees will be required to allow the Air Force a reasonable opportunity to investigate and, if a CERCLA response action is necessary, to accomplish it. The Deed will reserve a non-exclusive easement to the Air Force to enable it to investigate any such discoveries and take any remedial action found to be necessary.

5.8.5 General: The Deed will contain a provision stating that the Transferee and subsequent transferees, in their use and occupancy of the property, will be responsible for complying with all applicable federal, state, and local laws relating to asbestos. The Deed will also state that the Air Force will be responsible for conducting any CERCLA remedial action found to be necessary for hazardous substances released or disposed of on the property prior to the date of the Deed, so long as the property recipient is not a potentially responsible party under CERCLA for the release or disposal. The above response assurance by the Air Force does not mean the Air Force will perform or fund any remediation to accommodate a change in land use desired by the Transferee that is inconsistent with use restrictions or covenants contained in the Deed or other related property transaction documents.

5.9 Lead-Based Paint (LBP) - Facilities other than Target Housing & Residential Property

LBP and/or LBP hazards might be present in facilities other than target housing and residential property on the property since many of the facilities listed in Table 2.0 were built prior to 1978. The Transferee will be notified through the EBS and supporting SEBS documentation of the possible presence of LBP and/or LBP hazards in these facilities. Notice will be provided to the Transferee that the Transferee will be responsible for managing all LBP hazards and potential LBP hazards in compliance with all applicable laws and regulations.

5.10 LBP and LBP-Containing Materials and Debris (collectively "LBP")

LBP was commonly used prior to 1978 and may be located on the Property. The Transferee is advised to exercise caution during any use of the Property that may result in exposure to LBP. Appropriate notification and transferee's responsibilities, consistent with AFRPA policy, will be provided in the Deed relative to this fact of common use of LBP prior to 1978.

Therefore, the Deed will include a notice to the Transferee and subsequent transferees notifying them that LBP may be on the Property and advising them that caution should be exercised during any use of the Property that may result in exposure to LBP. By a grantee covenant in the Deed, the Transferee and its successors will acknowledge and accept responsibility for managing LBP, including LBP in soils, in accordance with all applicable laws and regulations and for promptly notifying the Air Force of any discovery of LBP in soils that appears to be the result of Air Force activities and is at concentrations requiring remediation. The Transferee and subsequent transferees will be required to provide the Air Force an opportunity to investigate such discoveries and, if a CERCLA remedial action is necessary, to accomplish it. The Deed will reserve a non-exclusive easement to the Air Force to enable it to investigate any such discoveries and take any remedial action found to be necessary.

5.11 Sanitary Sewer Systems (Wastewater)

Since the EBS, the sanitary sewer system has been transferred by easement to Sacramento County in 1998. The oxidation ponds were removed from use for emergency overflow. A large regional collector pipe was installed and the force main exiting Mather was

replaced with a gravity line connecting to this regional pipeline just west of Mather. The former Mather AFB Sanitary Sewer System (the "System") consists of gravity flow and pressurized lateral and main lines, which together comprise the wastewater collection system.

Wastewater generated within the boundaries of the Property is collected and discharged to the Sacramento County regional wastewater collection system using this former Air Force System. The System includes lift stations at Facilities 3280, 3281 and 7012 (includes generator building 7007), which are located on this Property. As facilities 3280, 3281, 7007, and 7012 were transferred as part of the sanitary sewer system, they and therefore will not be transferred as part of the subject Property. There is one lift station (Facility 7006) in Parcel A-1 that was not part of the System transfer. Lift station Facility 7006 serves Facilities 7005 and 7010. The Transferee will be responsible for submitting required applications for discharging wastewater to the sanitary sewer system and for meeting all applicable wastewater discharge permit standards.

The following wastewater sites on the Property, which discharged waste into the System, were investigated under the IRP: OT-23/Main Base Sanitary Sewer System, SD-55/OWS at Facility 7038, SD-57 at Facility 7019, SD-59 at Facility 4251, SD-60/OWS at Facility 6900, SD-61/OWS at Facility 6905, SD-64/OWS at Fuel Truck Wash Rack, Facility 4120, SD-65/OWS at Facility 6910, SD-66/OWS at Facility 6915, SD-67/SAC Area Sanitary Sewer System and SD-84/SAC Area Sewer Lines to Sewage Treatment Plant. Except for OT-23, SD-57 and SD-59, these sites were closed (contaminated soil was excavated at site SD-65) and received regulatory concurrence for NFA or site closure. SVE remediation of soil contamination is in progress at Sites OT-23, SD-57, and SD-59; additional site-specific information is presented in Section 5.2. Deed covenants for sites under the IRP are described in Section 5.2.

5.12 Drinking Water Quality

The potable water distribution system on the former Mather AFB is owned and operated by Sacramento County. The water systems for each facility connecting to the County potable-water distribution system are owned by the Air Force and will be transferred as part of the Property. Historically, potable water is supplied to the Property by the Mather water supply wells, consisting of four (4) wells in the Main Base area and five (5) wells in the former Military Family Housing (Housing) area, including water storage tanks in both areas. A 16-inch pipeline connects the Housing area wells to the Main Base area distribution system and a smaller area to the northeast of Mather. As of 2009, the Main Base water distribution system included about 4.4 million gallons of storage capacity. Location of the former Mather AFB supply wells are provided in Attachment 1, Figure 3.

In 1997 it was discovered that three of the four Main Base water supply wells were impacted by perchlorate contamination that had migrated in groundwater from an off-site source. As a result, the Main Base supply wells were not being used because perchlorate contamination found in or near these wells exceeded the Maximum Contaminant Level (MCL) of 6 micrograms per liter [µg/L] established by California regulation. Since 1997, the primary source for water to the Main Base area has been the family housing area wells. The non-impacted Main Base supply well (Well MB-4) could be used as a source of potable water as it has had no perchlorate detections; however, the County has reserved MB-4 for emergency use such as fighting fires.

5.13 Indoor Air Quality (Soil Vapor Intrusion)

Evaluation of risk to indoor air quality was not required by any of the Mather RODs and has not been performed for any closed IRP sites. However, indoor air quality risk has become a standard part of the site investigation process within CERCLA when a potential pathway exists. The Air Force has agreed to evaluate indoor air risk for the remaining active IRP sites. The results of those evaluations will be presented in site closure reports. ESDs to address land-use restrictions related to potential risk through vapor intrusion to indoor air have been completed for the *Soil OU Sites and Groundwater OU Plumes ROD* and for the *Basewide OU Sites ROD*. Covenants will be included in the Deed to prevent unacceptable human exposure to soil vapor or residual contamination at Basewide OU Sites FT-10C/ST-68, LF-18, and OT-23 and S&GW OU Sites ST-37/ST-39/SD-54, SD-57, and SD-59. The Transferee will be prohibited from engaging in any surface or shallow soil disturbance (within the geographic area subject to the IC), until and unless it is demonstrated that VOC contamination at these site(s) is no longer a threat to human health and the environment; and constructing any structures for human occupation (within the geographic area subject to the IC) without evaluating or addressing the risks posed by vapor intrusion. Deed covenants to implement these ICs for sites under the IRP are described in Section 5.2.

5.14 Air Permits

An SMAQMD air permit was required for the SVE extraction system for non-CERCLA sites ST-29 and ST-71. The vapors extracted by this system have been treated by the treatment system at Sites ST-37, ST-39, SS-54 (a detailed discussion about these sites is included in Sections 5.2 and 5.3). This permit was terminated in March 2011 after the treatment system was converted from SVE to bioventing.

5.15 Floodplains

Certain areas on the Property are located within a 100-year flood plain as delineated by FEMA (see Attachment 8 of the SEBS). The Transferee will be responsible for complying with any applicable laws and regulations for managing floodplains, including the strict control of construction activities located within floodplains. The Deed will include a notification advising the transferee of its 100-year flood plain responsibilities. The location of floodplains on the Property is provided in Figure 5, Attachment 9, of the SEBS.

5.16 Biological Resources

5.16.1 Threatened and Endangered Species

Parcel A-1 contains seasonal wetlands and vernal pools, which provide habitat for species protected under the Endangered Species Act (ESA). The locations of wetlands and vernal pool habitats on the Property are identified in the *Delineation of Potential Jurisdictional Wetlands and Waters of the U.S. for the Mather Field Study area in Rancho Cordova* (Wetlands Research Associates, 2004). The endangered vernal pool tadpole shrimp (*Lepidurus packardi*) and threatened vernal pool fairy shrimp (*Brachinecta lynchi*) have been documented to occur in

vernal pool habitats on the Property. In addition, two plant species – the endangered Sacramento Orcutt grass (*Orcuttia viscida*) and threatened slender Orcutt grass (*Orcuttia tenuis*) – though not documented as occurring at Mather, have potential to occur in vernal pool habitat within the Property boundaries. The *Mather Field Natural Resources Assessment* (Wetlands Research Associates, 2004) maps the locations of special-status species occurrences on the Property.

Section 7 of the ESA requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) on actions that may affect a federally listed species. The Air Force has initiated Section 7 consultation in support of the *Disposal and Reuse ROD* for the former Mather AFB, and the USFWS Service is currently in the process of preparing a Biological Opinion. The Draft Biological Opinion establishes a requirement for a Memorandum of Understanding between the County and the USFWS outlining management practices and prohibited activities for protected habitats on the Property. Parcel A-1 transfer will not occur until the Biological Opinion is finalized and issued. Parcels P-1 and P-2 have no biological resources subject to the Biological Opinion.

The Deed will reference the existence of the species and their regulatory control and will contain a restrictive covenant requiring the Transferee to establish an MOU for protected habitats on the Property and to comply with other applicable provisions of the Biological Opinion.

5.16.2 Other Special-Status Species

Parcel A-1 provides potential habitat for several special-status species not listed under the ESA but for which special consideration is provided under other environmental regulations, such as NEPA and the California Environmental Quality Act. The Mather Field Natural Resources Assessment (Wetlands Research Associates, 2004) identified six special-status plant species and 18 special-status wildlife species that have either been documented as occurring at Mather or having the potential to occur there. Almost all of the plant and invertebrate species, as well as the western spadefoot toad (*Spea hammondii*) are associated with vernal pools and similar wetland habitats. The remaining species may use vernal pools as a water source in the spring and for foraging year-round, but are mainly associated with the California annual grassland and/or scrub and woodland vegetation communities present at Mather. Special-status species that have been specifically identified on Parcel A-1 are California fairy shrimp (*Linderiella californica*), a federal species of concern, and Burrowing Owl (*Athene cunicularia*), a state species of concern. Other special-status species may occur in suitable habitats on the Property.

5.16.3 Wetlands and Waters of the U.S.

Wetlands and Waters of the U.S. are mapped in the *Delineation of Potential Jurisdictional Wetlands and Waters of the U.S. for the Mather Field Study area in Rancho Cordova* (Wetlands Research Associates, 2004). Parcel A-1 contains numerous jurisdictional wetland features, including vernal pools, vernal swales, vernal marshes, and seasonal wetlands. The Property is also traversed by several intermittent and perennial streams that comprise jurisdictional waters of the U.S. Jurisdictional wetlands and waters of the U.S. are regulated by

the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act. Wetlands and streams are also regulated by various other federal and state laws and policies, including Executive Order 11990 (Protection of Wetlands), and Section 1602 of the California Fish and Game Code. The Deed will reference the existence of these wetlands and their regulatory control, and will contain restrictive provisions assuring no actions may be taken which would adversely affect those wetlands.

Additionally, a Wetlands Management Plan is currently being developed by Sacramento County to describe protection of wetland and vernal pool habitat at Mather as a required condition of the SROD issued by the Air Force. The SROD states that, unless Sacramento County enters into agreements to protect wetlands and endangered species prior to the conveyance of Parcel A, the deed will contain a restriction to manage the area consistent with a management plan approved by appropriate federal and state regulatory agencies, including but not limited to the USEPA, USFWS, California Department of Fish and Game, and the U.S. Army Corps of Engineers (USACE). The Draft Final Wetlands Management Plan designates vernal pool and wetland habitats in the western portion of Parcel A-1, within the operational boundary of Mather Airport, as "protected habitats." This designation is intended to afford habitat protection while allowing vegetation maintenance and management activities required to ensure aircraft operating safety. Sacramento County is currently in the process of obtaining Section 404 permits for fill of wetlands in the portions of the property planned for future Airport Commercial use, and mitigation will be provided pursuant to the permit requirements. The remainder of the wetlands on the Property is not designated for development or protection, but will continue to be managed in a manner that complies with the Clean Water Act, the ESA, and FAA mandates.

6.0 STATE LAND USE COVENANT

The groundwater response action for MB/SAC Area, Site 7, and Northeast plumes is on-going and several S&GW OU, Basewide OU, and Supplemental Basewide OU sites have contaminants that exceed levels allowable for unrestricted use. Therefore, environmental restrictions to be incorporated in the Deed(s) are required as described in Section 5.2. Additionally, land use controls and restrictions will be incorporated in one or more State Land-Use Covenant(s) (SLUC). In the SLUC, these land use controls and restrictions will be expressed in a different format, but they will be consistent with the Air Force environmental restrictive covenants in the Deed(s). The SLUC will be prepared and signed by a State of California ("State") regulatory agency. The SLUC will contain certain requirements and procedures that will bind the transferee and run with the land. The SLUC will provide for State agency enforcement of the restrictive covenants in the Deed. Modifications or termination of the SLUC must be undertaken in accordance with State law and provisions in the SLUC itself. The SLUC will be signed by the Transferee and recorded within ten (10) days of the Property's transfer by deed.

7.0 REGULATOR COORDINATION

The California EPA and the U.S. EPA, Region IX, were notified in February 2011 of the initiation of this FOST, supporting SEBS documentation, and were invited to participate in

preparing the working draft documents consistent with the provisions of AFRPA's Procedures for Processing Findings of Suitability to Lease/Transfer (FOSL/FOST) and Supporting Environmental Documents, issued jointly by Alan K. Olsen, Air Force Base Conversion Agency (AFBCA), Thomas W. L. McCall Jr., U.S. Air Force, Deputy Assistant Secretary (DAS)/Environment, Safety and Occupational Health (ESOH), and Timothy Fields Jr., U.S. EPA, Deputy Assistant Administrator (DAA)/Office of Solid Waste and Emergency Response (OSWER) in a memo dated June 8, 1995. Consolidated draft documents were provided on May 9, 2011 for formal agency review and comment.

Regulatory comments received from DTSC, the CVWB, and the USEPA are included in Attachment 6. Responses to agency comments are included in Attachment 7. Note that AFRPA and U.S. EPA do not agree on the response to U.S. EPA's revised comment 13 on the Draft Final FOST, so this comment remains unresolved. Depending on whether U.S. EPA concurs with the other responses, these may also remain unresolved. However, AFRPA believes that any disagreement on these comments does not preclude U.S. EPA concurrence on the planned transfer of the property. Correspondence related to regulatory concurrence on this FOST will be provided in Attachment 8.

DTSC has requested the following announcement be included in this FOST: Should portions of the subject Property ever be considered for the proposed acquisition and/or construction of school properties utilizing state funding, a separate environmental review process in compliance with California education Code 12710 et seq. must be conducted and approved by DTSC.

Transfer of the property will not occur until USEPA and DTSC have an opportunity to review and provide comments on the environmental notifications and restrictions in the draft Deed.

8.0 PUBLIC NOTICE

Public notice, as required by the FOST process, was published in the Sacramento Bee on (May 13, 2011). A copy of notice is included as Attachment 9.

[REMAINDER OF PAGE LEFT BLANK INTENTIONALLY]

9.0 FINDING OF SUITABILITY TO TRANSFER

The proposal to transfer this Property by deed has been adequately assessed and evaluated for: (a) the presence of hazardous substances and contamination on the Property, (b) environmental impacts anticipated from the intended use for the Property, (c) adequacy of use restrictions and notifications to ensure that the intended use is consistent with protection of human health and the environment, and (d) adequate notice of disclosures, including those required by CERCLA 120(h). The anticipated future use of this Property does not present a current or future risk to human health or the environment subject to inclusion and compliance with the appropriate restrictions on use and disclosures as addressed above. The following covenant CERCLA language will be included in the Deed(s):

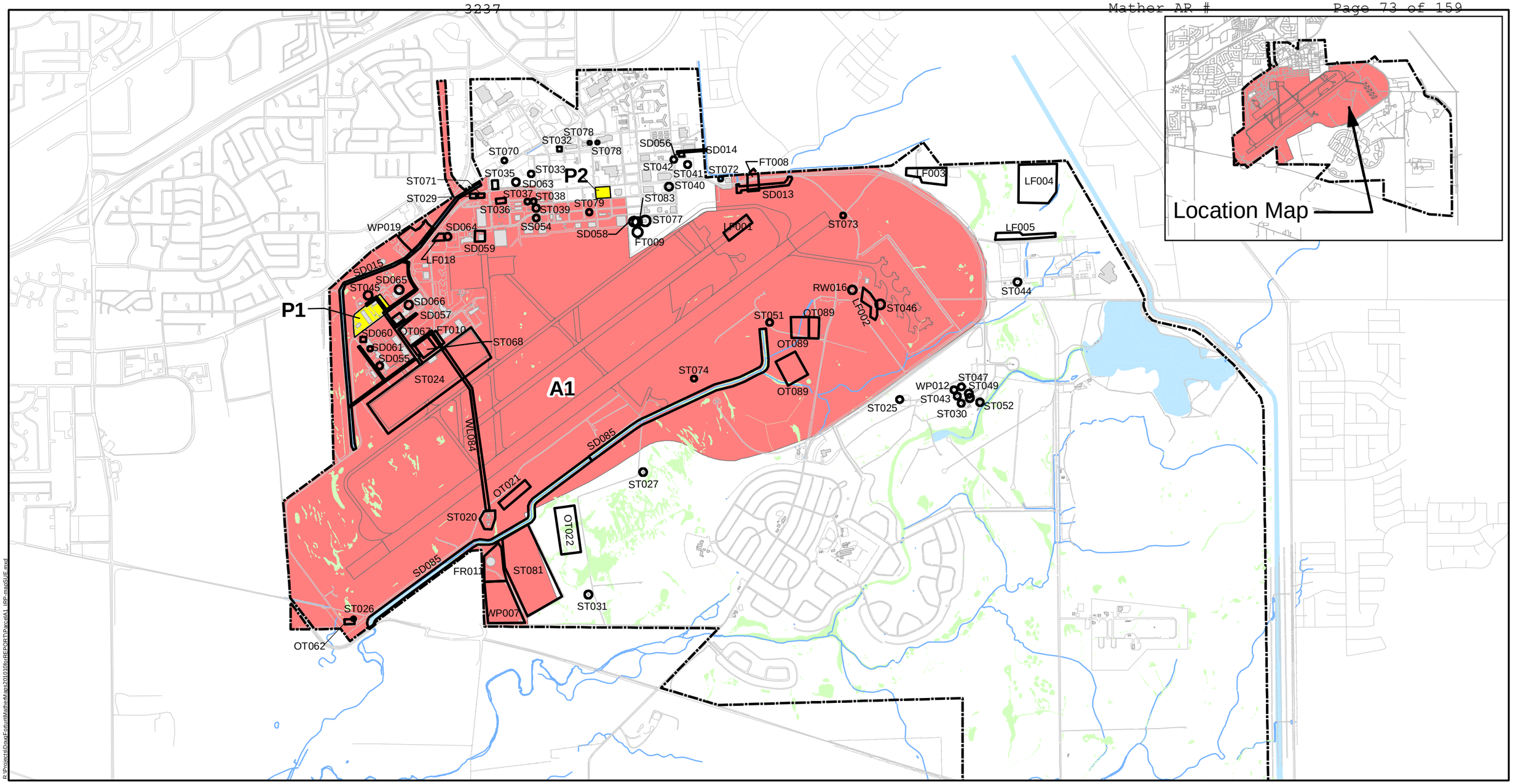
- CERCLA 120(h)(3)(A)(ii)(I) warranting that all remedial action under CERCLA necessary to protect human health and the environment with respect to hazardous substances remaining on the Property has been taken, or has been demonstrated to be operating properly and successfully, before the date of transfer.
- CERCLA 120(h)(3)(A)(ii)(II) warranting that any remedial action under CERCLA found to be necessary after the date of transfer with respect to such hazardous substances remaining on the property shall be conducted by the United States.
- CERCLA 120(h)(3)(A)(iii) granting the United States access to the Property in any case in which remedial action or corrective action is found to be necessary after the date of transfer.

The conditions of CERCLA Section 120(h) have been satisfied. Therefore, the Property is suitable for transfer.

MAR 1 3 2012
Date

ROBERT M. MOORE, SES
Director
Air Force Real Property Agency

Attachments:
1. Property Map(s)
2. Environmental Factors Table
3. Notice of Hazardous Substances Stored
4. Notice of Hazardous Substances Released
5. MMRP Site XU403, Practice Bomb Range Documentation/Correspondence
6. Regulator and Public Comments
7. AFRPA Responses to Regulator and Public Comments
8. FOST Concurrence Related Correspondence
9. FOST Related Notices and Correspondence



Legend

Creek | Wetlands/Vernal Pools | Parcel A1 | Buildings

Lakes | IRP Site | Parcel P1/P2 | Former Installation Boundary

0 500 1,000 2,000 Feet

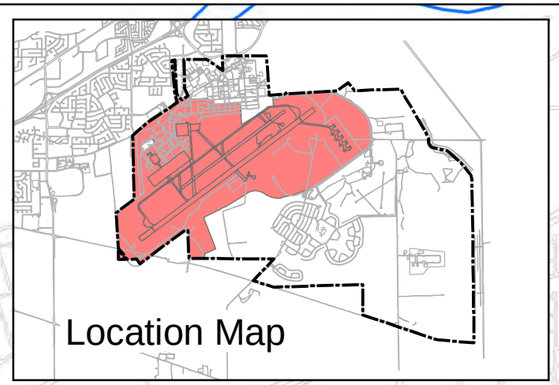
Air Force Real Property Agency
Former Mather AFB, Sacramento, California

N W E S

FIGURE 1

Mather AFB
Parcel A1, P1 and P2 FOST
Property, IRP, Wetland Site Map

Attachment 1



P-1

P-2

Northeast
GW Plume

IRCTS Perchlorate
GW Plume

IRCTS TCE
GW Plume

A/C and W
GW Plume

Main Base/SAC
GW Plume

IRCTS Perchlorate
GWPlume

Site 7
GW Plume

Legend

Parcel P1

Parcel A1

GW Plumes 2009

Wetlands

IRCTS GW Plume 2009

IRCTS GW Plume 2009

Creeks

Former Installation Boundary

0 750 1,500 3,000 Feet

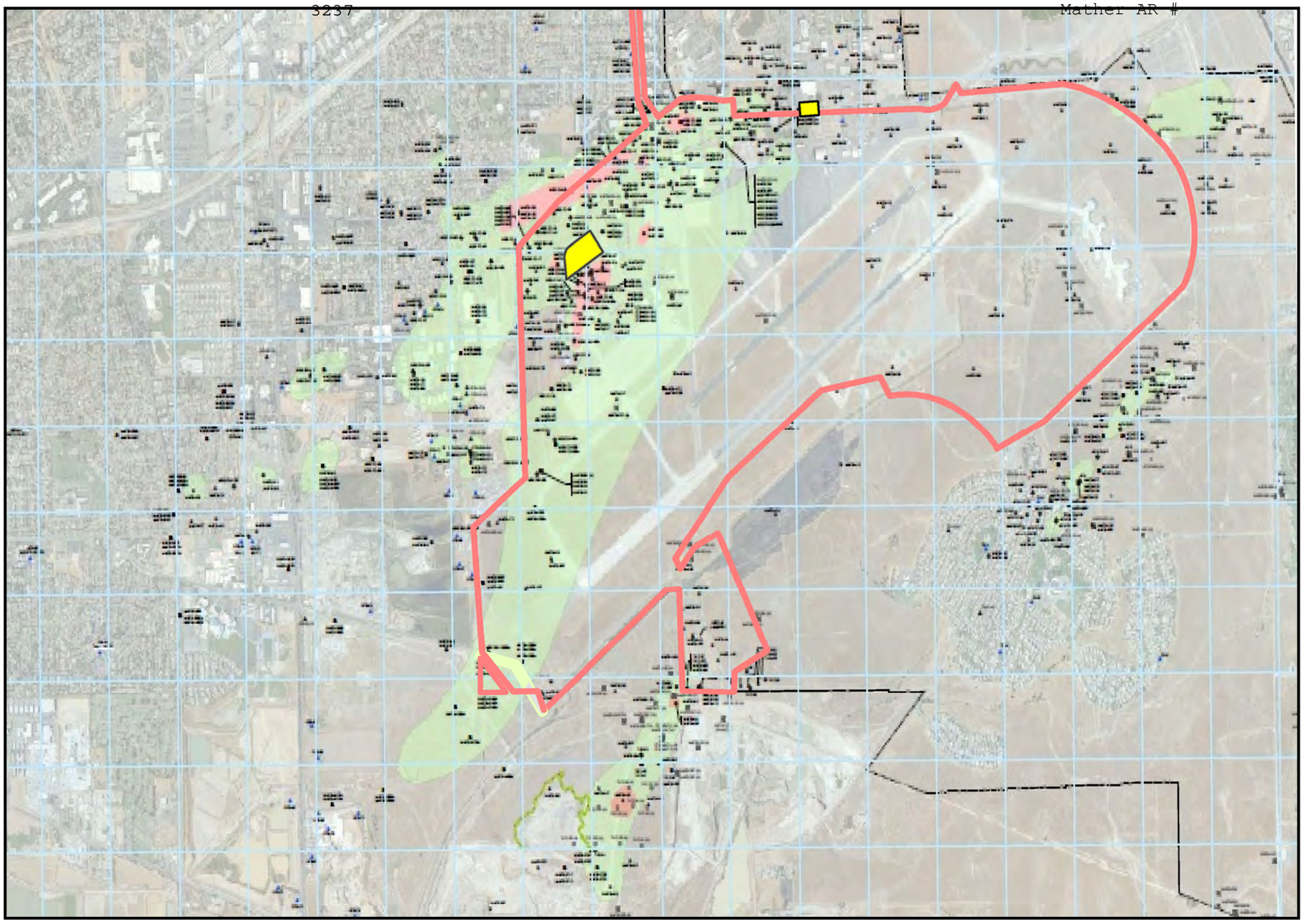
Air Force Real Property Agency
Former Mather AFB, Sacramento, California

N W E S

FIGURE 2

Mather AFB
Parcel A-1, P-1 and P-2 FOST
Mather Groundwater and Boeing/Aerojet IRCTS Plumes Map

Attachment 1



Legend

Parcel A1

Parcels P-1 and P-2

GW Plumes 2009

Former Installation Boundary

Extraction Well

Injection Well

0 500 1,000 2,000 Feet

Monitoring Well

Production/Supply Well

Air Force Real Property Agency
Former Mather AFB, Sacramento, California

N W E S

FIGURE 3

Mather AFB
Parcel A1, P1, and P2 FOST
Groundwater Monitoring Well and Supply Well
Location Map

Attachment 1

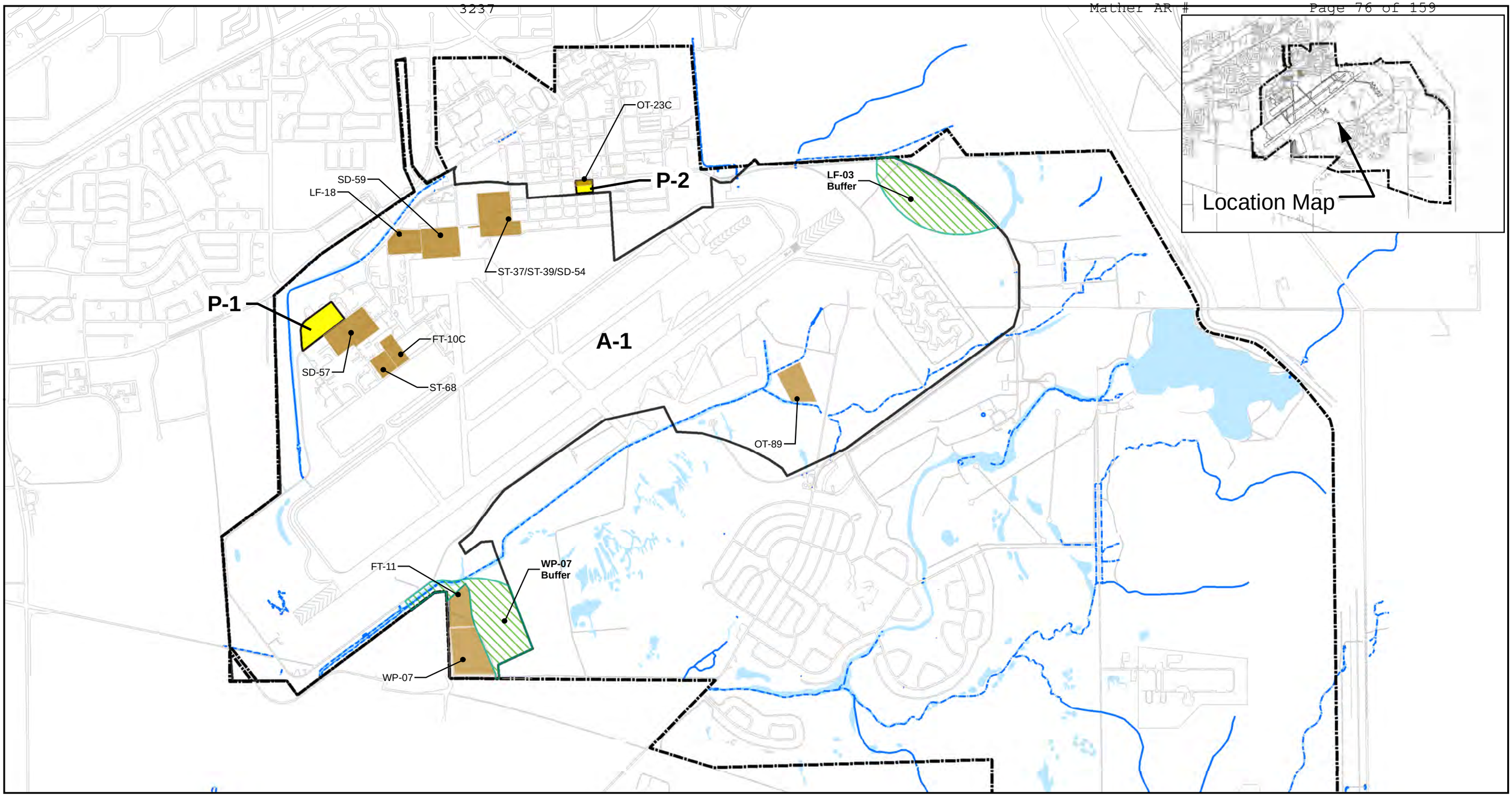


FIGURE 4

Parcel A1, P1, and P2 FOST
Sites FT-10C/ST-68, LF-18, OT-23C, WP-07/FT-11, ST-37/ST-39/SD-54, SD-57, SD-59 and OT-89

Attachment 1

Attachment 2
Environmental Factors Table

Each Factor identified with an "X" in the "Yes" column is discussed in Section 5.

Deed Restriction or Notification Required?			*Environmental Factors Considered*
No	**Yes**		
	Notification	Deed Restriction	***Environmental Restoration, Hazardous Substances, Petroleum***
		X	Hazardous Substances (Notification)
		X	Environmental Restoration Program; (IRP, EC-CR, and AOC)
		X	Petroleum Products and Derivatives
	X		Storage Tanks (USTs/ASTs)
	X		Oil/Water Separators (OWSs)
	X		Military Munitions (UXO), (DMM), (WMM), (MC)
	X		Radioactive & Mixed Wastes
			Disclosure Factors/Resources:
	X		Asbestos Containing Material (ACM)
X			Drinking Water Quality
		X	Indoor Air Quality (Soil Vapor Intrusion)
X			Indoor Air Quality (Radon)
X			Lead-Based Paint (Target Housing & Residential Property)
	X		Lead-Based Paint (Other than Target Housing & Res Property)
	X		LBP and LBP Containing Materials and Debris
X			PCBs
			Other Factors:
X			Outdoor Air Quality/Air Conformity/Air Permits
X			Energy (Utilities)
X			Pesticides
	X		Flood plains
X			Historic Property (Archeological/Native American, Paleontological)
	X		Sanitary Sewer Systems
X			Septic Tanks
X			Solid Waste
	X		***Biological Resources:***
		X	Sensitive Habitat
		X	Threatened and Endangered Species
		X	Wetlands

Note: EC-CR = Environmental Compliance-Closure Related

Attachment 3
Notice of Hazardous Substances Stored

NOTICE OF HAZARDOUS SUBSTANCES STORED PARCEL A-1

Notice is hereby provided that the following hazardous substances are known to have been stored for one year or more on the Property and the dates such storage took place. The information contained in this notice is required under the authority of regulations promulgated under section 120(h) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or "Superfund") 42 U.S.C. section 9620(h).

Hazardous Substances Stored on Former Mather AFB Parcel A-1							
Hazardous Substance(s)	**Regulatory Synonym(s)**	**CAS Registry Number**	**Quantity (kg/lbs)**		**Dates Stored**	**Response**	**Remarks**
Facility 4150							
1,1,1-Trichloroethane	NA	71-55-6	1,049	kg/ year	1976	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)
Facility 4260							
Paint remover	NA	Mineral oil; ethanol amines; glycol ethers and benzyl alcohol (100-51-6)	1,892	kg/ year	1986	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)
Trichlorotrifluoroethane	Freon 113	76-13-1	2,280	kg/ year	1986	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)
Facility 4473							
JP-4 jet fuel	NA	Benzene (71-43-2; toluene (108-88-3); hexane (110-54-3); and xylenes (1330-20-7)	15,200	kg/ flight day	1985, 1987 and 1990	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)
Facility 7022							
JP-4 jet fuel	NA	Benzene (71-43-2; toluene (108-88-3); hexane (110-54-3); and xylenes (1330-20-7)	91,481	kg/ month	1980	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)
Mogas	NA	NL	21,508	kg/ month	1980	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)

Attachment 3
Notice of Hazardous Substances Stored

Hazardous Substances Stored on Former Mather AFB Parcel A-1							
Hazardous Substance(s)	**Regulatory Synonym(s)**	**CAS Registry Number**	**Quantity (kg/lbs)**		**Dates Stored**	**Response**	**Remarks**
Oil, penetrating	NA	NL	1,254	kg/ month	1980	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)
Facility 7035							
Alkaline soap	NA	NL	9,880	kg/ year	1984	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)
Alkaline soap	NA	Butyl cellosolve (111-76-2); polyethylene glycol (25322-68-3);and sodium dodecyl benzene phosphate	26,600	kg/year	1986	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)
Methyl ethyl ketone	2-Butanone	78-93-3	2,660	kg/ year	1986	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)
Methyl ethyl ketone	2-Butanone	78-93-3	3,952	kg/ year	1984	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)
PD-680	NA	Petroleum distillates (8002-05-9)	28,880	kg/ week	1986	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)
PD-680	NA	Petroleum distillates (8002-05-9)	2,600	kg/ year	1984	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)
aircraft cleaning compound	NA	NL	3,800	kg/ month	1980	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)

Attachment 3
Notice of Hazardous Substances Stored

Hazardous Substances Stored on Former Mather AFB Parcel A-1							
Hazardous Substance(s)	**Regulatory Synonym(s)**	**CAS Registry Number**	**Quantity (kg/lbs)**		**Dates Stored**	**Response**	**Remarks**
Galla aircraft soap	NA	NL	3,800	kg/ month	1980	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)
PD-680	NA	petroleum distillates (8002-05-9)	1,672	kg/ month	1980	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)
Facility 7075							
Oil, engine	NA	petroleum distillates (8002-05-9)	4,990	kg/ year	1985	Removed prior to base closure (1993)	See Table C-2 (EBS, 1993)

NA not applicable
NL not listed

All hazardous substances listed in the Basewide EBS were removed by the Defense Reutilization and Marketing Office (DRMO) in 1995. Based on the latest VSI report, all known hazardous substances have been removed and properly disposed of. The County of Sacramento is responsible for removal, testing and treatment of any hazardous substances at the leased property.

Hazardous Substances Stored on Former Mather AFB Parcel P-1							
Hazardous Substance(s)	**Regulatory Synonym(s)**	**CAS Registry Number**	**Quantity (kg/lbs)**		**Dates Stored**	**Response**	**Remarks**
NA							

NA = not applicable

Hazardous Substances Stored on Former Mather AFB Parcel P-2							
Hazardous Substance(s)	**Regulatory Synonym(s)**	**CAS Registry Number**	**Quantity (kg/lbs)**		**Dates Stored**	**Response**	**Remarks**
NA							

NA = not applicable

ATTACHMENT 4
Notice of Hazardous Substances Release

NOTICE OF HAZARDOUS SUBSTANCES RELEASED - Parcels A-1, P-1 and P-2

Notice is hereby provided that the following hazardous substances are known to have been released on the Property and the dates such release took place. The information contained in this notice is required under the authority of regulations promulgated under section 120(h) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or "Superfund") 42 U.S.C. §9620(h).

Parcel A-1 - IRP Site LF-01 (*Runway Overrun Landfill)*

Substance*	Regulatory Synonym(s)	CAS Registry Number	Quantity (kg/yr) (lbs/yr)	Date	Hazardous Waste ID Number	Response	Remarks
NA							

NA–Not Applicable

Parcel A-1 - IRP Site LF-02 (*"8150" Landfill Area)*

Substance*	Regulatory Synonym(s)	CAS Registry Number	Quantity (kg/yr) (lbs/yr)	Date	Hazardous Waste ID Number	Response	Remarks
NA							

NA–Not Applicable

Parcel A-1 - IRP Site WP-07 (*"7100" Area Disposal Site)*

Substance*	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
1,4 Dichlorobenzene	1,4 DCB p-Dichlorobenzene	106-46-7	unknown	unknown	NA	Landfill was capped, with long-term groundwater monitoring post closure requirement. SVE system was installed in 1988 to treat VOCs in soil and was converted to bioventing in 2007. Groundwater extraction and treatment addresses related	Refer to the *1996 Soils OU and Groundwater OU ROD*
1,2-Dichloroethane	1,2-DCA Ethylene dichloride	107-06-2	unknown	unknown	NA		

Attachment 4
Notice of Hazardous Substances Release

Parcel A-1 - IRP Site WP-07 (*"7100" Area Disposal Site)*

Substance*	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
1,1-Dichloroethene	1,1-DCE 1,1-dichloroethylene	75-35-4	unknown	unknown	NA	groundwater contamination.	
Chloromethane	Methyl Chloride	74-87-3	unknown	unknown	NA		
Perchloroethene	PCE Perchloroethylene Tetrachloroethene Tetrachloroethylene	127-18-4	unknown	unknown	NA		
Trichloroethene	TCE Trichloroethylene	79-01-6	unknown	unknown	NA		
Vinyl chloride	Chlorethene Chloroethylene	75-01-4	unknown	unknown	NA		
TPH-D			unknown	unknown	NA		
POL constituents			unknown	unknown	NA		

*COCs identified in the *1996 Soils OU and GW ROD*

Parcel A-1 - IRP Sites FT-10C (*Fire Training Area 3 and ST-68 Underground Storage Tanks at Fuel Transfer Station)*

Substance*	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Benzene	Benzol Pyrobenzol	71-43-2	unknown	unknown	NA	Sites FT-10c and adjacent ST-68 were combined for purposes of remediation. Time critical action removal of contaminated soil was conducted at FT10c in1996 with waste consolidated in Landfill 4. All contaminated surface soil was excavated to below cleanup	Refer to the 1998 *Basewide OU ROD*
Toluene	Methylbenzene Phenylmethane	108-88-3	unknown	unknown	NA		
Ethylbenzene	Ethylbenzol	100-41-4	unknown	unknown	NA		
Xylenes		1330-20-7	unknown	unknown	NA		

Attachment 4
Notice of Hazardous Substances Release

Parcel A-1 - IRP Sites FT-10C (*Fire Training Area 3 and ST-68 Underground Storage Tanks at Fuel Transfer Station)*

Substance*	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Carbon tetrachloride	Carbon chloride (CCL_4) Tetrachloromethane Methane tetrachloride	56-23-5	unknown	unknown	NA	levels. However because subsurface contamination remained (TPH and VOCs), in situ treatment with SVE was the selected remedy for the combined sites FT-10c and ST-68 as prescribed in the 1998 *Basewide OU Sites ROD*. The SVE system was installed in 1997. As of December 31, 2007, the SVE system had removed 16,596 lbs of VOCs. The SVE system was shut down on July 28, 2008 for a rebound study. A ROD ESD was issued to excavate additional lead contaminated soil in 2008. Closure evaluations in progress.	
Total Petroleum Hydrocarbon-Gasoline and Diesel	TPH-G Gasoline-Range Organics and TPH-D Diesel-Range Organics		unknown	unknown	NA		
Oil and Grease			unknown	unknown	NA		
Lead		7439-92-1	unknown	unknown	NA		

*Contaminants of concern identified in the *1998 Basewide OU ROD*

Parcel A-1 - IRP Site SD-13 *Drainage Ditch No.1 (East of Facility 2950) and OWS 3990*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Metals[1]		varies	unknown	unknown	NA	Site was excavated as prescribed by the 1996 Soils and OU ROD. Confirmation samples indicate concentration below clean up levels. This site was closed with no further action.	Refer to 1996 *Soils OU Sites and Groundwater OU Plumes ROD* and *Draft Final Closure Report on Site 13,* Montgomery Watson 1998.
Total Petroleum Hydrocarbon-Diesel	TPH-D; Diesel Range Organics	NA	unknown	unknown	NA		
Polynuclear Aromatic Hydrocarbons[2]	PAH	65996-93-2	unknown	unknown	NA		
Pesticides[3]		varies	unknown	unknown	NA		
Oil and Grease			unknown	unknown	NA		

Attachment 4
Notice of Hazardous Substances Release

[1] Metal COCs identified in the 1996 *Soils OU Sites and Groundwater OU Plumes ROD* include aluminum, chromium, lead, manganese, silver and zinc in surface water; and arsenic, chromium, cobalt, copper, lead, mercury, nickel, vanadium, and zinc in sediment at SD-13.
[2] PAH COCs listed in the 1996 *Soils OU Sites and Groundwater OU Plumes ROD* include benzo(a)anthracene, benzo(g,h,i)perylene, fluoranthene, indeno (1,2,3-cd)pyrene, naphthalene, and pyrene at SD-13.
[3] Pesticide COCs identified in the 1996 ROD include Dieldrin, 4,4-dichlorodiphenyldichloroethane (4,4-DDD), 4,4-dichlorodiphenyl-dichloroethene (4,4-DDE), 4,4-dichlorodiphenyltrichloroethane (4,4-DDT), alpha-chlordane, and gamma-chlordane in sediment at SD-13.

Parcel A-1 - IRP Site SD-15 (*Drainage Ditch, West, No.3, including OWS 7039 & UST)*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity (kg/yr) (lbs/yr)	Date	Hazardous Waste ID Number	Response	Remarks
Metals[1]		varies	unknown	unknown	NA	The site was excavated and contaminated soil consolidated under Site 7 landfill cap. Sample confirmation indicates clean-up goals have been met. Site was closed with no further action.	*1996 Soils OU Sites and Groundwater OU Plumes ROD*
Pesticides[2]		varies	unknown	unknown	NA		
Polynuclear Aromatic Hydrocarbons	PAHs	65996-93-2	unknown	unknown	NA		
Polychlorinated Biphenyls[3]	PCBs	1336-36-3	unknown	unknown	NA		
Oil and Grease			unknown	unknown	NA		
Total Petroleum Hydrocarbon-Diesel	TPH-D		unknown	unknown	NA		
Total Petroleum Hydrocarbon-Gasoline	TPH-G		unknown	unknown	NA		

[1] The 1996 *Soils OU Sites and Groundwater OU Plumes ROD* lists Chromium, Lead, Manganese, Vanadium, and Zinc as COCs in surface water at this site. Additionally, Barium, Cadmium, Chromium, Copper, Lead, Mercury, Zinc were identified as COCs in sediment.
[2] Pesticide COCs identified in the 1996 *Soils OU Sites and Groundwater OU Plumes ROD* include dieldrin, alpha- and gamma- chlordane as COCs in sediment at SD-15.
[3] The 1996 Soils *OU Sites and Groundwater OU Plumes ROD* lists Aroclor 1248, Aroclor 1254, and Aroclor 1260 as COCs in sediment at SD-15.

Attachment 4
Notice of Hazardous Substances Release

Parcel A-1 - IRP Site LF-18 (*Old Burial Site North of Facility 4120)*

Substance*	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Trichloroethylene	TCE Trichloroethene	79-01-6	unknown	unknown	NA	The selected remedy in accordance with the 1998 Basewide OU ROD was *in situ* SVE system to remove vadose zone VOCs contamination. The SVE system has been operational since 2000. LF-18 was combined with SD-59 for purposes of remediation. The LF-18 vapor extraction wells were connected to theSD-59 SVE system in 2001. As of December 2007, SVE system for LF-18/SD-59 had removed 8.047 lbs of VOCs. The system was shut down in 2008 for a rebound study. Site closure evaluations are in progress.	*1998 Basewide OU Sites ROD*
1,2-dichloroethene	1,2-DCE 1,2-dichloroethylene	156-60-5	unknown	unknown	NA		

*COCs identified in the 1998 Basewide OU Sites ROD.

Parcel A-1 - IRP Site ST-20 (Sewage Treatment and UST and Sludge Drying Beds)

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Metals[1]		varies	unknown	unknown	NA	The sludge was removed and contaminated soil excavated per the *Soils OU ROD* in 1996-1997. Lead was further listed as COC in the 1998 *Basewide OU ROD*, which covered the sewage treatment area of the site. Additional excavation was conducted to remove lead and PAH soil contamination in 1998 in accordance with the 1998 *Basewide OU ROD*.	*1996 Soils OU Sites And Groundwater OU Plumes ROD* and *1998 Basewide OU ROD*; *Draft Remedial Action Report,* MWH 2006

Attachment 4
Notice of Hazardous Substances Release

Parcel A-1 - IRP Site ST-20 (Sewage Treatment and UST and Sludge Drying Beds)

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
						Confirmatory sampling indicated clean-up objectives had been met.	
Total Petroleum Hydrocarbon-diesel	TPH-D		unknown	unknown	NA	TPH-diesel was identified as the only COC at the UST location of Site 20. Contaminated soil was excavated in 1997 per the 1996 *Soil OU ROD*. Additional site investigation was conducted in 1998, and additional excavation was conducted in 1998 as prescribed under the *Basewide OU ROD*. A groundwater well was installed to confirm compliance with clean-up level, with 4 quarters of monitoring completed in 2002. TPH-diesel was not detected in groundwater.	
Polynuclear Aromatic Hydrocarbons[2]	PAH	65996-93-2	unknown	unknown	NA	Additional site investigation was conducted for the sewage treatment area of Site 20 during the Additional Site Characterization in 1998. As prescribed in the *Basewide OU Sites ROD,* the site was excavated in 1998 to remove contaminated soil. Confirmatory sampling indicated clean-up objectives had been met.	

Attachment 4
Notice of Hazardous Substances Release

Parcel A-1 - IRP Site ST-20 (Sewage Treatment and UST and Sludge Drying Beds)

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Bis(2-ethylhexyl) phthalate	BEHP	117-81-7	unknown	unknown	NA	BEHP was identified during the additional site investigation and added as a COC in the 1998 *Basewide OU Sites ROD* for ST-20. Even though confirmatory sampling of the excavated area indicated levels were only slightly above the ROD clean up level (0.33 mg/kg) and below ARAR performance standards, 4 quarters of groundwater monitoring of phthalates was included in the selected remedy under the 1998 *Basewide OU ROD*. However, phthalates were inadvertently left out during the 4 quarters of groundwater monitoring completed in 2002.	Maximum BEHP concentration left in soil=0.35 mg/kg (ARAR standard =4 mg/kg) 1998 Basewide OU Sites ROD

[1] The Soils OU Sites and Groundwater OU Plumes ROD identified lead, mercury, and zinc as COCs in surface soil in the sludge drying bed area of Site 20.
[2] The 1998 *Basewide OU ROD* lists PAHs (benzo[a]pyrene, benzo[a]anthracene, benzo[k]fluoranthene, and benzo[b]fluoranthene) as COCs in surface soil.

Attachment 4
Notice of Hazardous Substances Release

Parcel A-1 - IRP Site OT-23 (*Main Base Sanitary Sewer System)*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Tetrachloroethene	PCE Perchloroethene, Perchloroethylene, Tetrachloroethylene	127-18-4	unknown	unknown	NA	The *1998 Basewide OU Sites ROD* identified PCE as the main COC for this site. SVE was the selected remedy in the *1998 ROD* and an SVE system has operated at OT-23 since 2000. As of December 31, 2007, the SVE system had removed 4,321 lbs of VOCs. The SVE system was shut down on August 15, 2008 for a rebound study and was restarted on October 1, 2008.	*1998 Basewide OU Sites ROD*

Parcel A-1 - IRP Site ST-24 (*JP-4 Spill Site at SAC Aircraft Parking Apron)*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Total Petroleum Hydrocarbons (JP-4)	Jet Propulsion Fuel, Type 4		1,000 gal	1983 spill of JP-4 on loading area	NA	Investigations revealed no COCs at the site. No further action recommended in the 1998 *Basewide OU Sites ROD.*	*1998 Basewide OU Sites ROD*

Attachment 4
Notice of Hazardous Substances Release

Parcel A-1 - IRP Sites ST-37 (*Former USTs at Facility 3389)*; ST-39 (*Former USTs at Hazardous Waste Storage Facility 4305)*; and SS-54 (*Hazardous Waste 90-day Accumulation Point at AGE Shop, Facility 4348)*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
TPH-Gasoline	TPH-G Gasoline Range Organics		unknown	unknown	NA	USTs and auxiliary equipment were removed in 1988, 1993, and 1995. ST-37, ST-39 and SS-54 were combined in the *1996 Soil OU Sites and Groundwater OU Plumes ROD* for purposes of remediation because of proximity and common contaminants. BTEX, diesel, gasoline, oil and grease were identified as COCs in soil. Additional site investigation also indicated chlorinated solvents (PCE and TCE) at the sites. Contaminated soil was excavated in 1997, and an SVE system was installed in 1998. The original system was replaced by a new SVE system in 2007. As of 2007, approximately 265,661 lbs of VOCs have been removed by the SVE system. Additional excavation of petroleum contaminated soil was conducted during the installation of sewer lines along Macready Ave.	Refer to *1996 Soil OU Sites and Groundwater Plumes ROD*
TPH-Diesel	TPH-D; Diesel Range Organics DRO		unknown	unknown	NA		
Benzene		71-43-2	unknown	unknown	NA		
Toluene		108-88-3	unknown	unknown	NA		
Ethylbenzene		108-88-3	unknown	unknown	NA		
Xylene		1330-20-7	unknown	unknown	NA		
Oil and Grease			unknown	unknown	NA		
TCE	Trichloroethene Trichloroethylene	79-01-6	unknown	unknown	NA		
PCE	Perchloroethene, Perchloroethylene, Tetrachloroethylene Tetrachloroethene	127-18-4	unknown	unknown	NA		

Attachment 4
Notice of Hazardous Substances Release

Parcel A-1 - IRP Site SD-57 (*Oil Water Separator at 7019)*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Trichloroethylene	TCE Trichloroethene	79-01-6	unknown	unknown	NA	Chlorinated VOCs were the primary constituents of concern at SD-57, although TCE was only the COC indicated in the *1996 Soil OU Sites and Groundwater Plumes ROD*. SD-57 is identified as one of the source of groundwater contamination for the Main Base /SAC/Area plume*. Per the 1996 ROD, SVE is the selected remedy for the Site 57 soil contamination in conjunction with groundwater monitoring to evaluate effectiveness of the selected remedy. An SVE system has been operating at SD-57 since 1997. As of December 31, 2007, the SVE system had removed 5,968 lbs of VOCs. The SVE system was shut down on August 5, 2008 and was restarted on October 1, 2008 for a rebound study. A groundwater extraction system was installed in 1998 in the SD-57 area to remediate groundwater contamination as part of the Main Base/SAC Area plume remediation. Additionally, two deep vapor wells were connected for extraction of carbon tetrachloride contamination in the vadose zone.	Refer to *1996 Soil OU Sites and Groundwater Plumes ROD*

* PCE, TCE, 1,1-DCE, cis-l,2-DCE, 1,2-DCA, benzene, carbon tetrachloride, chloromethane, and diesel-range TPH, gasoline-range TPH, and xylenes are the COCs for the groundwater plume underlying SD-57, which is Main Base/SAC Area plume.

Attachment 4
Notice of Hazardous Substances Release

Parcel A-1 - IRP Site SD-60, *Oil Water Separator at Facility 6900*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Xylenes		1330-20-7	unknown	unknown	NA	The selected remedies for SD-60 were excavation and *ex situ* treatment of contaminated soil in the *1996 Soils OU Sites and Groundwater OU Plumes ROD.* Contaminated soil was excavated in 1996; however, additional contamination (including chlorinated compounds) was encountered during remedial activities and an ESD to the ROD was issued in 1998 with SVE as the selected remedy for the additional subsurface contamination. An SVE system was installed at SD-60 in 1998 and was operated until 2000. The 2001SVE rebound test indicated decline of contaminant concentrations and results of soil and groundwater sampling indicated concentrations below clean up levels. SD-60 was closed with USEPA and DTSC concurrence in 2002.	*1996 Soils OU Sites and Groundwater OU Plumes ROD; 1998 Explanation of Significant Differences to the ROD, Soil OU Sites and Groundwater OU Plumes ROD, Sites 56, 59, and 60.*
TPH-Gasoline			unknown	unknown	NA		

Parcel A-1 - IRP Site SD-65 (*Oil Water Separator at Facility 6910 north of Facility 7009)*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Chromium			unknown	unknown	NA	OWS was removed in 1992. The selected remedies for SD-65 include excavation and ex situ disposal and treatment of contaminated soil. Approximately 620 cy of contaminated	*1996 Soils OU Sites and Groundwater OU Plumes ROD*
Lead			unknown	unknown	NA		
TPH-Gasoline			unknown	unknown	NA		
TPH-Diesel			unknown	unknown	NA		

Attachment 4
Notice of Hazardous Substances Release

Parcel A-1 - IRP Site SD-65 (*Oil Water Separator at Facility 6910 north of Facility 7009)*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Oil and Grease			unknown	unknown	NA	soil was excavated from two excavation sites at SD-65 in 1996 (OWS site and sump site). SD-65 was closed in 2000 with the EPA, DTSC, and CVWB concurrence.	

Parcel A-1 - IRP Site SD-85 *(South Ditch, Northeast Morrison Creek Tributary)*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Metals[1]						A non-time critical removal action of contaminated soil was conducted in 1997, when drainage sediments were removed and disposed under landfill cap at IRP Site 7 and/or treated ex situ. With the exception of oil and grease, all identified COCs met the site cleanup goals. With concurrence of the regulatory agencies, it was determined that the concentrations of oil and grease remaining in soil did not pose a threat to human health, ecological receptors, or the underlying groundwater. The site was closed with no further action in the 2006 *Supplemental Basewide OU ROD.*	*2006 Supplemental Basewide OU ROD.*
Dioxins[2]							
Pesticides[3]							
Polynuclear Aromatic Hydrocarbons[4]		65996-93-2					
Total Petroleum Hydrocarbons-Diesel							
Oil and Grease							

[1] Metals (Chromium, mercury, silver, zinc, and lead in sediment and aluminum, iron, lead, and manganese in surface water) were identified as COCs at SD-85 in the *2006 Supplemental Basewide OU Sites ROD.*
[2] Dioxin and furans 1,2,3,4,6,7, 8-Heptachlorodibenzodioxin, 1,2,3,4,6,7, 8-Heptachlorodibenzofuran, and Octachlorodibenzodioxin) were identified COCs at SD-85 in the *2006 Supplemental Basewide OU Sites ROD.*
[3] Pesticides DDT, DDD, DDE, and chlordanes were identified COC at SD-85 in the *2006 Supplemental Basewide OU Sites ROD.*

Attachment 4
Notice of Hazardous Substances Release

[4] Anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, dibenz(a,h)fluoranthene benzo(k)fluoranthene, indeno(1 ,2,3-c,d)pyrene, phenanthrene, fluouranthene, and pyrene were identified COCs at SD-85in the *2006 Supplemental Basewide OU Sites ROD*.

Parcel A-1 - IRP Sites OT-89 (*Old Trap Range at NE End of Runway)*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Lead						The primary COC at Site 89 is lead associated with shot gun discharges and clay targets at two former firing stations. The shot fall area of one of these stations was covered with imported fill to a depth of approximately 8 to 10 feet. The site was investigated. Lead and PAHs were identified as COCs. Contaminated soil was excavated in 1999 and 2001 with some contamination left in place. Based on concentration of lead left in place after the removal action, it was determine that there were no unacceptable risks to human health under occupational scenario but there is potential adverse risk under unrestricted scenario if the soil is disturbed. The selected remedy for remaining contamination in accordance with the 2006 *Supplemental Basewide OU ROD* was excavation; removal, stabilization, and disposal of contaminated soil; long term monitoring of surface water and groundwater; and institutional controls. Site excavation was already accomplished prior to the finalization of the ROD in 2006. Long term monitoring for surface water and	Maximum lead contamination remaining in the soil is 255= mg/kg Refer to *2006 Supplemental Basewide OU Sites ROD*
Polynuclear Aromatic Hydrocarbons		65996-93-2					

Attachment 4
Notice of Hazardous Substances Release

Parcel A-1 - IRP Sites OT-89 (*Old Trap Range at NE End of Runway)*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
						groundwater was terminated in 2005 with DTSC and EPA concurrence since monitoring has shown there is no impact to groundwater. The site was closed in the 2006 ROD with institutional controls and land use restrictions.	

Parcel A-1 - IRP Site *Main Base/ SAC Area Groundwater Plume*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Benzene		71-43-2	unknown	unknown	NA	The two groundwater plumes were grouped together for remediation purposes in the *1996 Soils OU Sites and Groundwater OU Plumes ROD*. PCE, TCE, carbon tetrachloride and 1,1-DCE are the primary contaminants in the Main Base/SAC Area Plume. A groundwater pump-and-treat system was installed in phases: Phase I began operating in April 1998 to address hot-spots on-base, Phase II extraction wells for hot-spots off-base and Phase III extraction wells to augment plume capture were added in January 2000, and Phase IV extraction wells were added in September 2002 to increase extraction and augment off-base capture. Long term monitoring has shown that concentrations of COCs have decreased from historic maximums.	
Toluene		108-88-3	unknown	unknown	NA		
Ethylbenzene		100-41-4	unknown	unknown	NA		
Xylene		1330-20-7	unknown	unknown	NA		
Tetracholorethene	PCE Perchloroethylene, Tetrachloroethylene Tetrachloroethene	127-18-4	unknown	unknown	NA		
Tricholoroethylene	TCE Trichloroethene	79-01-6	unknown	unknown	NA		
1,1-Dichloroethene	1,1-DCE 1,1-dichloroethylene	75-35-4	unknown	unknown	NA		
cis-1,2 Dichloroethylene	cis-1,2 DCE cis-1,2 Dichloroethene	156-59-2	unknown	unknown	NA		

Attachment 4
Notice of Hazardous Substances Release

Parcel A-1 - IRP Site *Main Base/ SAC Area Groundwater Plume*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
1,2-Dichloroethane	1,2 DCA	107-06-2	unknown	unknown	NA	The groundwater treatment plant is currently operating at approximately 933 gpm with 15 extraction wells. As of September 30, 2008, the Main Base/SAC Area treatment plant had treated 6.2 billion gallons of water and removed 3,368 lbs of VOCs. Ten new monitoring wells were installed in 3Q/08 to replace dry wells, monitor contamination in a perched zone and improve capture zone definition for the Main Base/SAC Area Plume.	
Carbon Tetrachloride	CCL_4	56-23-5	unknown	unknown	NA		
Chloromethane	Methyl Chloride	74-87-3	unknown	unknown	NA		
Lead	Pb	7439-92-1	unknown	unknown	NA		

Parcel A-1 - IRP Site 7 *Groundwater Plume*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Tetrachloroethene	PCE Perchloroethylene, Tetrachloroethylene Tetrachloroethene	127-18-4	unknown	unknown	NA	PCE, TCE, cis-1,2-DCE and 1,2-DCA are the primary contaminants in the Site 7 Plume. A groundwater pump-and-treat system was installed in 1998 with a single extraction well; another extraction well was added later. System operation has been interrupted periodically due to aggregate mining activities. Concentrations of TCE, PCE and 1,2-DCA at 7-PZ-37 decreased from historic maximums.	
Trichloroethylene	TCE Trichloroethene	79-01-6	unknown	unknown	NA		
cis-1,2-Dichloroethene	cis-1,2 DCE	156-59-2	unknown	unknown	NA		
1,2-Dichloroethane	1,2 DCA	107-06-2	unknown	unknown	NA		
1,4-dichlorobenzene	1, 4 DCB						
Benzene		71-43-2					

Attachment 4
Notice of Hazardous Substances Release

Parcel A-1 - IRP Site 7 *Groundwater Plume*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Chloromethane	Methyl Chloride	74-87-3	unknown	unknown	NA		
TPH-Diesel	TPH-D Diesel Range Organics						
Vinyl chloride							

Parcel A-1 - IRP Site 7 *Northeast Plume*

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Tetrachloroethene	PCE Perchloroethylene, Tetrachloroethylene Tetrachloroethene	127-18-4	unknown	unknown	NA	The Air Force, with concurrence from USEPA Region IX and the State of California, selected a remedial action for the Northeast Plume that included land use restrictions and long term groundwater monitoring as prescribed in the 1996 *Soil and Groundwater OU ROD*. The extent of the plume exceeding cleanup levels has decreased since the capping of landfill source areas in 1996. Groundwater contamination associated with the Northeast Plume beneath Parcel A-1 does not exceed cleanup levels, except at MAFB-411, indicating that remedial actions implemented for the Northeast Plume are operating properly and successfully. An OPS demonstration report for the Northeast Plume and the Northeast Perimeter landfills received EPA concurrence on (TBD).	
1,2-Dichloropropane	1,2-DCP Propylene Chloride	78-87-5	unknown	unknown	NA		
Carbon tetrachloride	CCL_4	56-23-5	unknown	unknown	NA		
Chloromethane	Methyl Chloride	74-87-3	unknown	unknown	NA		
cis-1,2-DCE	cis-1,2 DCE cis-1,2 Dichloroethene	156-59-2	unknown	unknown	NA		
TPH-Diesel							

Attachment 4
Notice of Hazardous Substances Release

Parcel P-1 - Sources upgradient of Parcel P-1 have released solvents into the groundwater, which has migrated beneath portions of Parcel P-1.

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number	Response	Remarks
Carbon tetrachloride	Carbon chloride (CCl_4) Tetrachloromethane Methane tetrachloride	56-23-5	unknown	unknown	U211	Groundwater extraction related to this site has occurred since late 1999 and concentrations beneath the source and near Parcel P-2 have been below the aquifer cleanup standard since about 2002.	Releases were not on the subject property, but resulting contaminant plumes in groundwater have historically migrated beneath the subject property. As of April 2011, groundwater extraction on adjacent property is ongoing, and monitoring of groundwater continues.
Trichloroethene	TCE trichloroethylene	79-01-6	unknown	unknown	U228		
Perchloroethene (PCE)	Perchloroethylene, Tetrachloroethylene Tetrachloroethene	127-18-4	Unknown	Unknown	U210		

Attachment 4
Notice of Hazardous Substances Release

Parcel P-2 - A dry cleaning facility a block north of Parcel P-2 is the source for both soil vapor and groundwater contamination. The soil vapor was interpreted in 1998 as just overlapping the northwest corner of Parcel P-2, under Mather Boulevard.

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/lbs	Date	Hazardous Waste ID Number (if applicable)	Response	Remarks
Perchloroethene (PCE)	Perchloroethylene, Tetrachloroethylene Tetrachloroethene	127-18-4	Unknown	Unknown	U210	Soil vapor extraction (SVE) has been conducted since 2000 and the concentrations and extent of soil vapor has been reduced significantly. Groundwater extraction related to this site has occurred since late 1999 and concentrations beneath the source and near Parcel P-2 have been below the aquifer cleanup standard since about 2002.	Releases were not on the subject property, but resulting contaminant plumes in soil gas and groundwater may have historically migrated beneath the subject property. As of April 2011, SVE at Site 23C is ongoing, and monitoring of both soil gas and groundwater continues.

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

No Further Action (NFA) Explosives Safety Submission (ESS) for Practice Bomb Range Site XU403, Former Mather Air Force Base (AFB), letter November 13, 2009 (AR #2754);

DEPARTMENT OF THE AIR FORCE
AIR FORCE REAL PROPERTY AGENCY

NOV 18 2009

MEMORANDUM FOR AIR FORCE SAFETY CENTER
Attn: Mr. John Lahoff
9700 G Avenue, SE
Suite 126E
Kirtland AFB NM 87117-5670

FROM: AFRPA Western Region Execution Center
3411 Olson Street
McClellan CA 95652-1003

SUBJECT: No Further Action (NFA) Explosives Safety Submittal (ESS) for Practice Bomb Range Site XU403, November 2009, former Mather Air Force Base (AFB), California

1. The attached NFA ESS for Military Munitions Response Program (MMRP) Site XU403, Practice Bomb Range at the Former Mather AFB, California is provided for your review and coordination with the Department of Defense Explosives Safety Board (DDESB).

2. A designation of NFA is recommended for Site XU403 based on the findings of an extensive records search demonstrating no evidence that live demolition bombs were ever used at Mather Field.

3. Real property within the 3,000-foot practice bomb target safety zone of Site XU403 is under lease to Sacramento County. Upon approval of this NFA ESS, AFRPA will forward a copy of the NFA ESS to Sacramento County along with a notice informing them of the potential presence of practice bombs with small black powder explosive spotting charges at Mather and procedures to be followed in the event any military munitions are found. A copy of the signed MMRP site closure package will be placed in the Former Mather AFB Administrative Record once complete.

4. Please contact me at (916) 643-0830, ext. 203 or Ms. Diane Mathein at (916) 643-0830, ext. 331, with any questions or comments.

DOUGLAS V. FORTUN
BRAC Environmental Coordinator

Attachment:
NFA ESS for Site XU403, Practice Bomb Range at the Former Mather AFB, California

cc:
AFSC, Attn: Mr. John Lahoff (electronic copy)
AFCEE/EXC, Attn: Mr. Bernheisel (electronic copy only)
AFRPA WREC, Attn: Administrative Record (electronic copy and hardcopy)
DMC, Attn: Ms. Diane Mathein (electronic copy and hardcopy)
Parsons, Attn: Ms. Molly Enloe (electronic copy only)

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

Explosives Safety Submission (ESS)
No Further Action (NFA)

UNITED STATES AIR FORCE
MILITARY MUNITIONS RESPONSE PROGRAM (MMRP)
MUNITIONS RESPONSE SITE CHARACTERIZATION

XU403, Practice Bomb Range
Former Mather Air Force Base
Sacramento, California

November 2009

Prepared by

Air Force Real Property Agency (AFRPA) Western Region Execution Center
3411 Olson Street
McClellan CA 95652-1003

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

TABLE OF CONTENTS

Section		Page
1.0	BACKGROUND	1
1.1	Site Location and Description	1
1.2	Site History	1
1.3	Investigation Background	2
1.4	Current Land Use	3
1.5	Proposed Future Land Use	4
2.0	JUSTIFICATION FOR THE DECISION	5
3.0	CONTINGENCIES	6
4.0	SUMMARY	7
5.0	REFERENCES	8

FIGURES

1.1 Former Mather Air Force Base Location
1.2 1937 Aerial Photograph of Mather
1.3 1945 Aerial Photograph of Mather
1.4 Current Aerial Photograph of Mather
1.5 XU403 Munitions Response Area Site Layout
1.6 XU403 Current Use Property Area Map
1.7 XU403 Proposed Future Use Property Area Map

APPENDICES

Appendix A Acronyms List

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

1.0 BACKGROUND

The former Mather Air Force Base (Mather) is located in Sacramento County about 10 miles east of Sacramento and partially overlapping the City of Rancho Cordova in California. It was placed on the Base Realignment and Closure (BRAC) Commission list in 1988 and was closed in 1993. The airfield reopened in 1995 as Sacramento Mather Airport. This Explosives Safety Submission (ESS) to document No Further Action (NFA) applies to Munitions Response Area (MRA) Site XU403, a 787-acre Practice Bomb Range located in the northwest section of Mather that was used in 1931 and 1932 and between 1935 and 1940 (Figure 1-1). In August 1940, additional acreage was purchased to expand the practice bomb range by 4,477 acres. There is no documentation to indicate the expanded acreage was ever used for practice bombing; however, the acreage is delineated on figures within this report for completeness. Site XU403 is not an Installation Restoration Program (IRP) site.

1.1 Site Location and Description

Site XU403, Practice Bomb Range, is located in the northwestern portion of the former Mather AFB and consists of the area of the original Mather Field, 787 acres of land purchased in 1920. The site is also known as "Mather Field Bombing Range" and is listed on the Military Munitions Response Program (MMRP) inventory as XU403, Practice Bombing. In August 1940, an additional 4,477 acres was purchased and the land was labeled as a "Bombing Range." The resulting 5,264 acres covers nearly the entire former base area (Figure 1-2).

1.2 Site History

The following information on site history and bomb range usage was derived from the *Mather Field Bombing Range Activities Report* and the *Basewide Environmental Baseline Survey* (WPI, 1998; AFBCA, 1993).

Mather Field was opened in 1918 to serve as a flight training school for the U.S. Army Air Service (later the Army Air Corps, Army Air Forces, and ultimately the Air Force). The initial parcel used by the Army Air Service was 787 acres.

The air space around Mather Field was used for aerial gunnery training from 1918 to 1919. This training consisted of firing a drum-loaded Lewis gun over the propeller at small balloons or six-foot paper parachutes. The base was inactivated in 1922 due to cutbacks in defense spending.

The base was reactivated in November of 1930 and established with a complement of Boeing P-12 aircraft. These aircraft were equipped with .30- and/or .50-caliber machine guns and bomb racks configured to carry live and practice bombs weighing 17, 30, or 100 pounds. There is considerable evidence that air-to-ground gunnery and practice bombing activities took place at Mather Field between February 1931 and May 1932 using targets located at the south end of the 787-acre Mather Field. The base was returned to inactive status in November of 1932 and all buildings were either sold or razed in 1935.

In December 1934, the 7th Bombardment Group, consisting of three tactical squadrons, was transferred from March Field, CA to Hamilton Field, CA. While at Hamilton Field, the 7th Bombardment Group operated Martin B-10 and B-12, Boeing B-17, and Douglas B-18 bomber aircraft. These aircraft were equipped with .30- and/or .50-caliber machine guns and were capable of carrying 100-, 300-, 600-, 1,100-, and 2,000-pound live and practice bombs.

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

From May 1935 to September 1940, Mather Field was a sub-post of Hamilton Field and was used as a practice bombing range by the 7th and 31st Bombardment Squadrons of Hamilton Field. Various tests of extreme low and high altitude bombing were conducted for purposes of individual record and practice bombing at Mather. Bombing missions were conducted from altitudes as low as 200 hundred feet and some at the actual service ceiling of the airplane.

The following practice bombs (no live bombs) were referenced as used in the *Mather Field Bombing Range Activities Report*:

- 25-pound practice demolition;
- 40-pound practice incendiary;
- 50-pound practice demolition;
- 100-pound practice Mark I MI;
- 100-pound practice bombs containing about four pounds of black powder; and
- Smoke bottles were used with the M-38 bombs and black powder charges with the MK-1 and T-1 bombs.

An August 1937 aerial photograph shows a bomb target within the original 787-acre parcel near the current runway location. The bomb target consisted of 3 concentric circles with incremental radii of 100 feet, with a total radius of 300 feet from the center target to the outer circle (Figure 1-2).

In August 1940, 4,477 additional acres were acquired for use as a bombing area. In September 1940, one month after the purchase of the additional 4,477 acres, the 7th Bombardment Squadron was transferred from Hamilton Field to Salt Lake City, Utah. There is no documentary evidence of the use of Mather for practice bombing after the 7th Bombardment's departure and there is no evidence that practice bombs were dropped on the additional 4,477-acre area.

Eyewitness Accounts

Two eyewitness accounts to bombing activities at Mather Field were reported in the *Mather Field Bombing Range Activities Report* as follows:

- Mr. James Kobata, who lived approximately 1 mile from the target area near the intersection of Kiefer Boulevard and Happy Lane, recalls watching airplanes drop bombs along or at the south end of the runway at Mather Field during the 1936 to 1937 timeframe. Mr. Kobata stated he could remember that two or three airplanes would typically fly around the base and drop two or three bombs on each pass over the base. He did not believe the bombs were high explosive because they were not very loud when they went off and they produced white smoke. He does not recall seeing any fences, warning signs, craters, or bomb targets during visits to the base.
- Mr. Sam Furuike, who lived in the same general area as Mr. Kobata, recalls watching small, two-seat, single-engine planes drop practice bombs in the 1939-1940 timeframe. He said the bombs produced white smoke and little noise when they were dropped. The planes flew very low over his house and he recalled a bomb falling from one of the planes and landing near a neighbor's house. He said some people visited his neighbor and apologized for the incident. [Figure 1-5 of this

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

report shows the approximate location of the Furuike property near where the bomb may have been dropped]. Mr. Furuike also stated that his brother had dug up a bomb casing and mounted it on a fence post in front of the family residence. Mr. Furuike does not recall seeing any fences, warning signs, craters, or bomb targets at the base.

- An eyewitness stated that limited practice bombing probably continued at Mather Field until construction related to Flying School No. 7 began in December 1940. [No general or specific drop location was noted. This information is not included in the two interview summaries included in the report and could be attributable to a third person].

In 1941, Mather Field was reactivated and rebuilt as a school for pilot and navigator training. The first conclusive evidence the Mather Field Bombing Range was no longer in use is contained in a February 1942 report from the West Coast Training Center at Moffett Field to the Chief of the Air Corps that stated "No ranges are in operation at present."

The *Mather Field Bombing Range Activities Report* concluded that it is highly unlikely live demolition bombs were used at Mather Field.

By 1945, the configuration of Mather had changed with construction of numerous buildings/facilities in the northwest and northeast portion of the base as well as construction of new runways and taxiways (Figure 1-3). During the 1950s, the airfield runway was extended to accommodate larger aircraft, and then enlarged again with the addition of various aprons to support the Strategic Air Command mission (AFBCA, 1993). Figure 1-4 is a current aerial photograph of Mather.

1.3 Investigation Background

No geophysical or other investigation for munitions and explosives of concern (MEC) related to the practice bombing range has been conducted. However, Site XU403 has been the subject of an extensive records search to assess potential ordnance issues. Based on the findings of this investigation, no live demolition bombs were believed to have been used at Mather Field and a designation of NFA is recommended for Site XU403.

1998 Records Search

The *Mather Field Bombing Range Activities Report* details the results of an extensive records search. No evidence was found indicating live demolition bombs were ever dropped at Mather Field. The report notes that some of the practice bombs may have contained a spotting charge consisting of black powder.

2004 Practice Bomb Recovery

In July 2004, what is believed to have been a practice bomb was discovered south of the main runway and within a few hundred feet east-northeast of the intersection of Taxiway D and the main runway. The approximate location of the discovery is marked on Figure 1-5. The item was unearthed during trenching activities that occurred during replacement of NavAid communication cables near the runway. A diary documenting the day's activities for July 30, 2004 indicates, "Dug up some metal objects late in the afternoon. One looks like a small piece of culvert and the other is a cone, like the nose of a plane. We turned these over to the airport" (Houtsma, 2009). The metal object disappeared from a fenced enclosure several days later and

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

the Air Force was made aware of the finding only through informal conversation several years later.

2006 Practice Bomb Recovery

In November 2006, a 50-lb practice bomb was uncovered by sewer construction workers approximately 8 feet below ground surface in a trench east of the intersection of Mather Boulevard and Femoyer Street (Figure 1-5). The trench is located at the northeastern tip of the original 787-acre parcel. The Beale AFB Explosive Ordnance Disposal (EOD) team responded and determined that the bomb was inert and filled with dirt. No fuses or detonation/spotting charges were attached to, or contained within, the practice bomb. The EOD team indicated that this practice bomb was from World War II (WWII) or a prior-era and was likely associated with the use of Mather Field as a practice bombing range.

2009 Establishment of Safety Zone

In 2009, the Air Force Center for Engineering and the Environment (AFCEE) Range Division, in coordination with the Air Force Safety Center (AFSC), approved establishment of a safety zone at Mather. The purpose of the safety zone is to define an adequate boundary within which current and future land owners should be notified of its use as a historical practice bombing range. AFCEE used site-specific historical information including knowledge of the use of practice bombs containing black powder charges, sizes of bombs dropped, target sizes, and known drop elevations at Mather Field to determine the appropriate safety zone. Based on this information, AFCEE approved establishment of a 3,000-foot radius from any bomb target centers as an appropriate safety zone (Kuecker, 2009). The only known target at Mather Field is the one depicted on the 1937 aerial photograph. A 3,000-foot radius from the center of the 1937 bomb target is depicted on Figure 1-5 as the established safety zone for Mather. The safety zone consists of approximately 650 acres.

1.4 Current Land Use

At the time of closure, the base encompassed 5,845 acres. Most of the base was ruled surplus to the needs of the federal government and has been transferred or leased to various entities, primarily the County of Sacramento.

In 1995, the airport was officially reopened as Sacramento Mather Airport, a 2,675-acre cargo airport. Another 1,432 acres became the Mather Regional Park. Other areas of the former Air Force Base have been developed for housing, a business park, the Veterans Administration Medical Center, and the Federal Aviation Administration's Northern California TRACON facility. No institutional controls (ICs) related to use of the practice bomb range have been placed on property at Mather.

Existing use of the land at Mather is shown on Figure 1-6. All of the land area included within the 3,000-foot safety zone for the practice bomb range falls within real property Parcel A which is under lease to Sacramento County for use as an active airfield and for airport industrial uses. The Supplement to the Basewide Environmental Baseline Survey (SEBS), the Finding of Suitability to Lease (FOSL), and the Airport Lease do not provide notification of the presence of the practice bomb range (AFBCA, 1994; 1995a; 1995b). Commercial development areas are located north of the safety zone. Residential housing, vacant areas, and a golf course are located east of the safety zone.

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

1.5 Proposed Future Land Use

The proposed future use of parcels within Mather is shown on Figure 1-7. Proposed uses of the land within the 3,000-foot safety zone for the practice bomb range include continued use as an active airfield, airport industrial uses, new airport and/or commercial and economic development, and conservation areas. Much of the area outside the safety zone will be used for airport uses, residential, commercial, parks, and conservation areas.

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

2.0 JUSTIFICATION FOR THE DECISION

There is no evidence indicating live demolition bombs were ever dropped at Mather Field. A 3,000-foot safety zone has been established as a boundary within which current and future property owners will be notified of the potential for practice bombs containing spotting charges to be uncovered and procedures to be followed in the event any military munitions are found. This contingency is detailed in Section 3.0.

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

3.0 CONTINGENCIES

The 3,000-foot practice bomb target safety zone lies within real property Parcel A, Airport Parcel, which is under lease to Sacramento County for airport uses. The Air Force Real Property Agency (AFRPA) will notify Sacramento County of the existence of Site XU403 and of its use as a historical practice bombing range. Notification will include reference to the fact that there is the possibility for practice bombs to be discovered on the property and that some of the practice bombs used at Mather contained a small black powder explosive spotting charge.

Any deed or other property transfer documents generated for real property within the 3,000-foot safety zone will contain a notification of the existence of the former practice bomb range and a recommendation that in the event any metal object that resembles military munitions, or a fragment thereof, is found the item should not be touched or disturbed further and the local police or fire department should be contacted to report the finding.

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

4.0 SUMMARY

A designation of NFA is recommended for Site XU403 based on the findings of an extensive records search demonstrating no evidence that live demolition bombs were ever used at Mather Field.

Real property within the 3,000-foot practice bomb target safety zone of Site XU403 is under lease to Sacramento County for airport use. Upon approval of this NFA ESS, AFRPA will forward a copy of the NFA ESS to Sacramento County along with a notice informing them of the potential presence of practice bombs with small black powder explosive spotting charges at Mather and procedures to be followed in the event any military munitions are found. A copy of the signed MMRP site closure package will be placed in the Former Mather AFB Administrative Record once complete.

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

5.0 REFERENCES

AFBCA (Air Force Base Conversion Agency), 1993. *Basewide Environmental Baseline Survey.* December 1. AR #955.

AFBCA, 1994. *Supplement to the Basewide Environmental Baseline Survey for Parcel A – Airport Property.* May 10.

AFBCA, 1995a. *Finding of Suitability to Lease (FOSL) Parcel A.* January 9.

AFBCA, 1995b. *Parcel A Lease.* March 21.

Houtsma, Phyllis, 2009. E-mail correspondences from Phyllis Houtsma, Sacramento County Inspector to Sheri Thompson-Duarte, Manager Sacramento Airport Operations. July 23.

Kuecker, Joan, 2009. E-mail correspondences from Joan Kuecker, AFCEE to Diane Mathein. May 11.

WPI (Waste Policy Institute), 1998. *Mather Field Bombing Range Activities.* April. AR #1723.

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

FIGURES

Attachment 5
Figure 1-1
Former Mather AFB Location

Military Munitions
Response Program
Site XU403
Practice Bomb Range
Former Mather Air Force Base
Sacramento, California

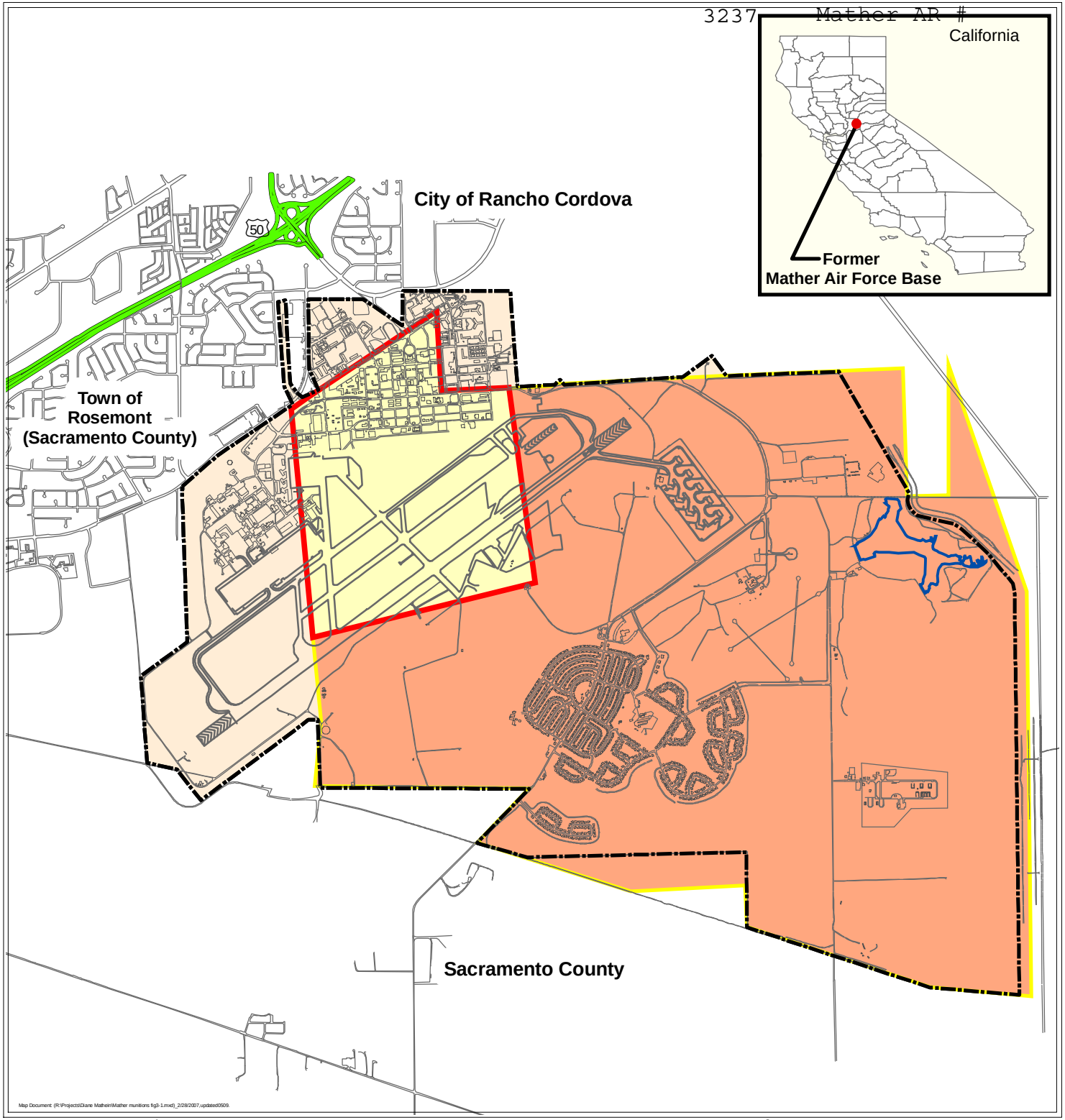


Image: Google Earth, July 2009

Attachment 5

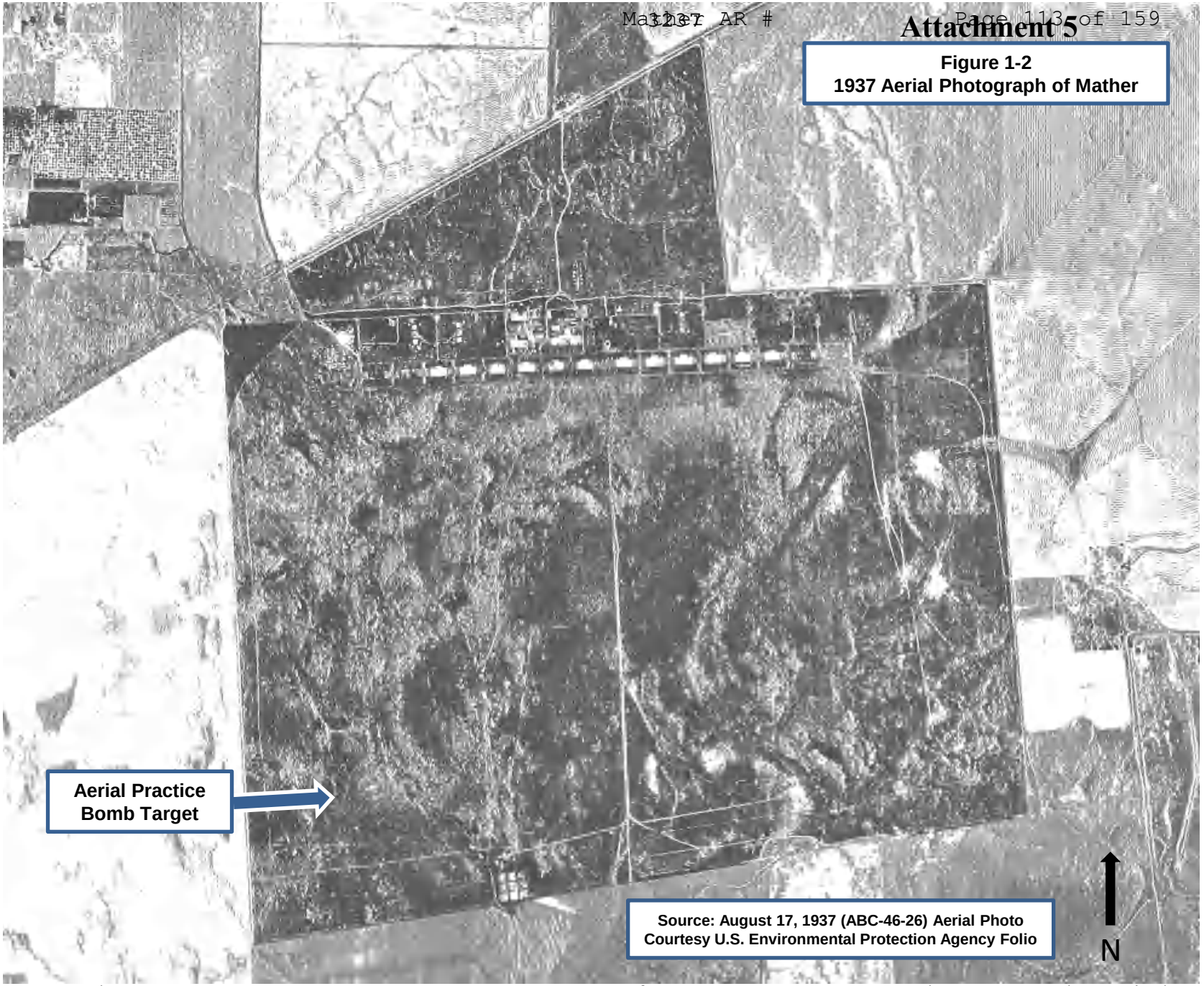
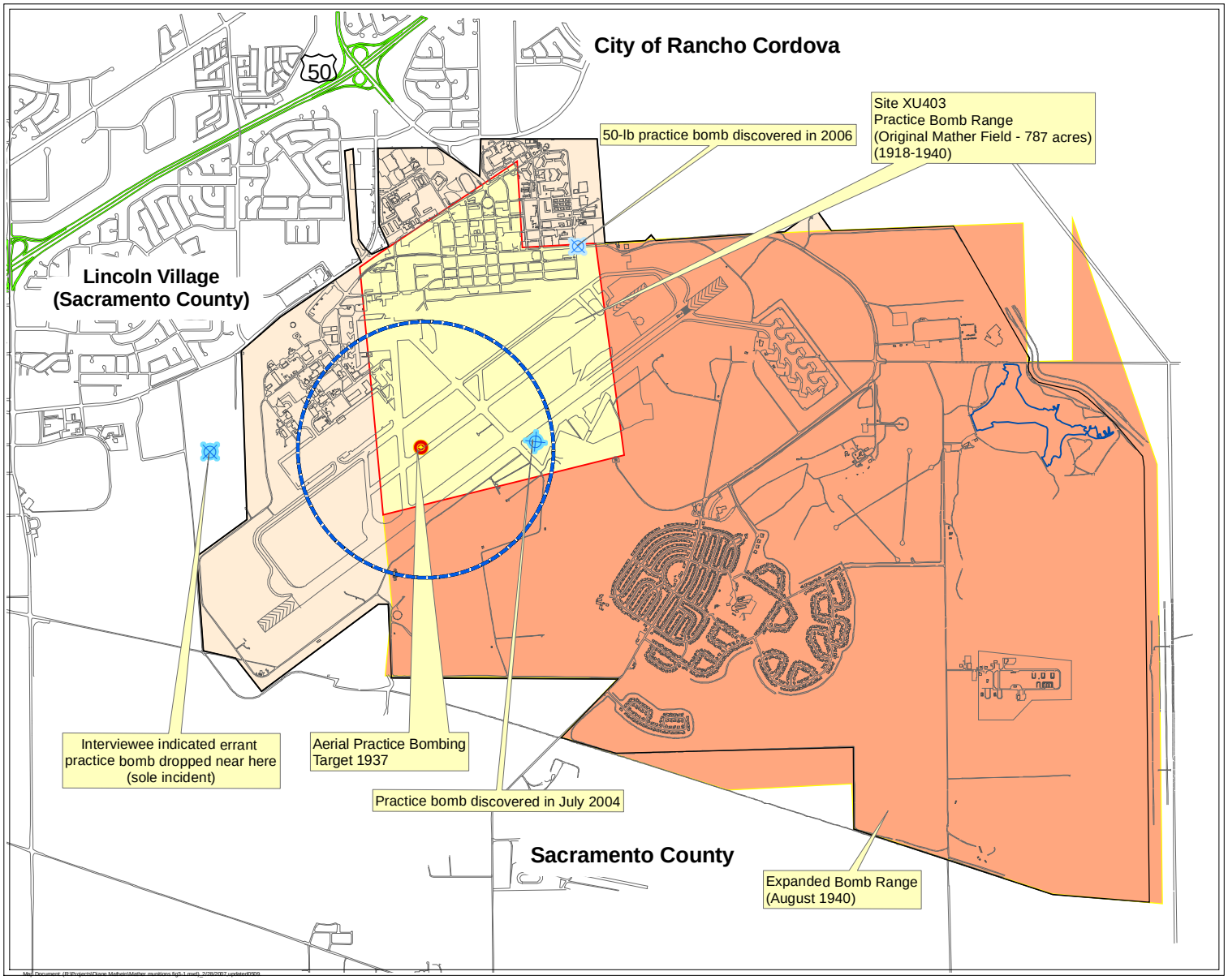


Figure 1-2
1937 Aerial Photograph of Mather

Figure 1-4
Current Aerial Photograph of Mather

Figure 1-5
Site XU403 Munitions Response Area
Site Layout

Military Munitions
Response Program
Site XU403
Practice Bomb Range
Former Mather Air Force Base
Sacramento, California



Legend

- Site XU403-Original Mather Field: 787 acres
- Expanded Mather Field Bomb Range, August 1940 4,477 acres
- 3000' Safety Zone for Practice Bomb Target
- Aerial Practice Bomb Target
- Practice Bomb Discovered
- Mather Lake
- Former Mather AFB Boundary in 1993
- Airfield and Base Roads
- Highway 50

0 1,250 2,500 5,000 Feet

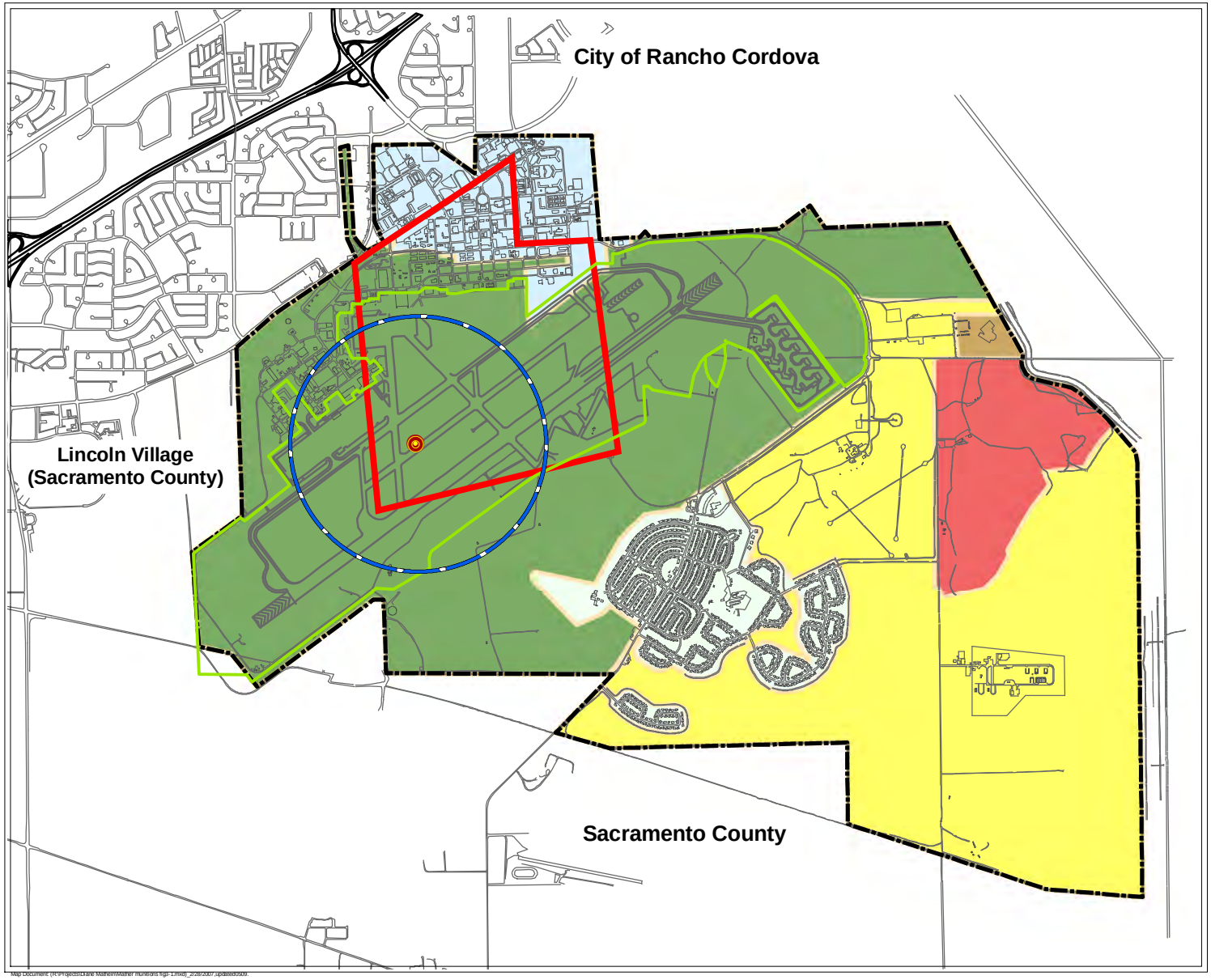
0 0.25 0.5 1 Miles

N

Image: Google Earth, July 2009

Figure 1-6
Current Use
Property Area Map

Military Munitions
Response Program
Site XU403
Practice Bomb Range
Former Mather Air Force Base
Sacramento, California



Legend

- Site XU403-Original Mather Field: 787 acres.
- 3000' Safety Zone for Practice Bomb Target
- Airfield Fence
- Airport/Airfield Industrial Use
- Vacant
- Residential Housing and two elementary schools
- FAA Radar Facility
- Commercial Development
- Recreational (parks/golf course/lake/sports park)
- Former Mather AFB Boundary 1993
- Airfield and Base Roads
- Aerial Practice Bomb Target

0 1,250 2,500 5,000 Feet

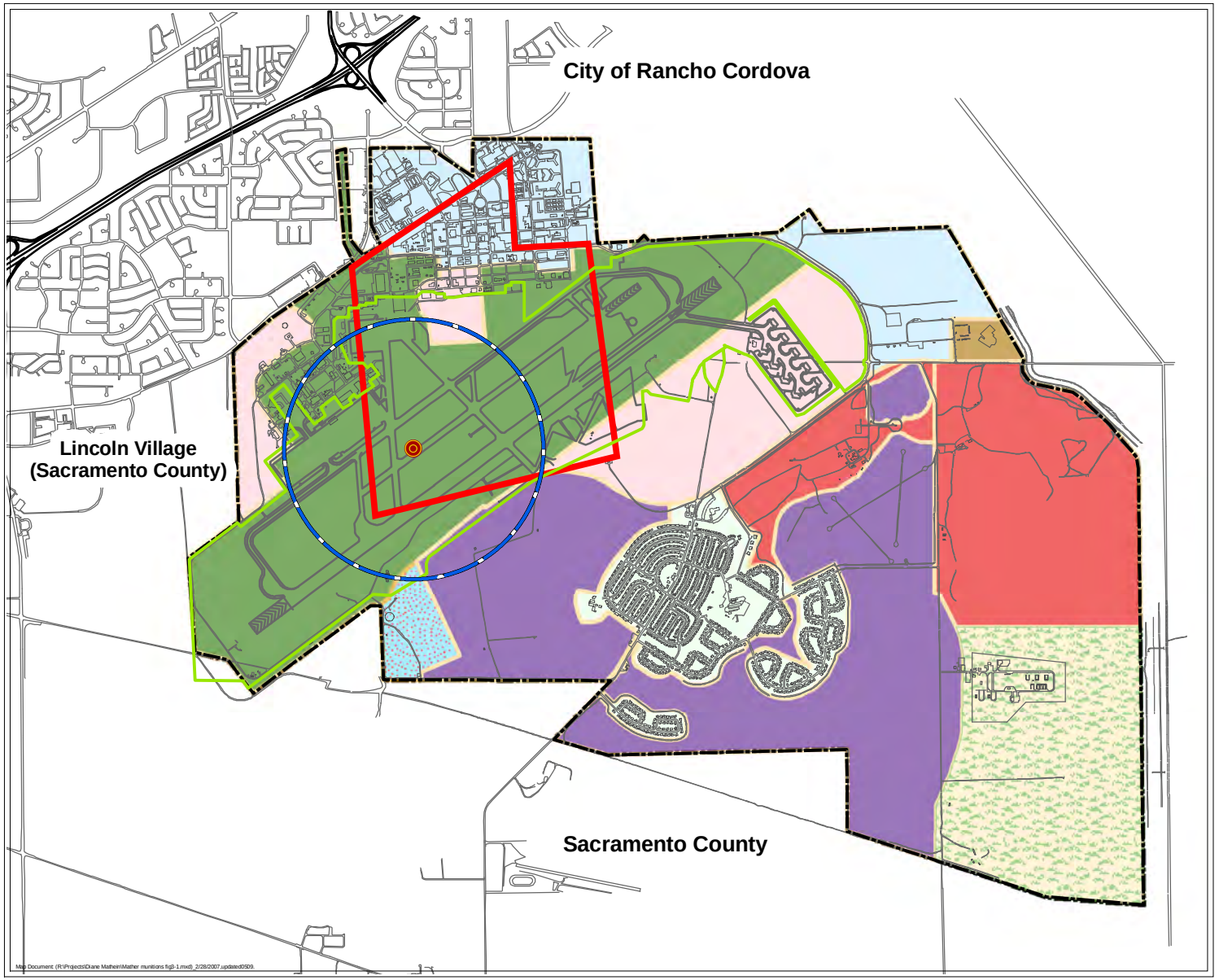
0 0.25 0.5 1 Miles

N

Attachment 5

Figure 1-7
Future Use
Property Area Map

Military Munitions
Response Program
Site XU403
Practice Bomb Range
Former Mather Air Force Base
Sacramento, California



Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

APPENDIX A
Acronyms List

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

List of Acronyms

AFB	Air Force Base
AFBCA	Air Force Base Conversion Agency
AFCEE	Air Force Center for Engineering and the Environment
AFRPA	Air Force Real Property Agency
AFSC	Air Force Safety Center
BRAC	Base Realignment and Closure
DoD	Department of Defense
EOD	Explosive Ordnance Disposal
ESS	Explosives Safety Submission
FOSL	Finding of Suitability to Lease
FOST	Finding of Suitability to Transfer
IC	Institutional Control
IRP	Installation Restoration Program
Mather	Former Mather Air Force Base
MEC	Munitions and Explosives of Concern
MMRP	Military Munitions Response Program
MRA	Munitions Response Area
NFA	No Further Action
SEBS	Supplement to the Basewide Environmental Baseline Survey
U.S.	United States
WWII	World War II

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

Air Force Safety Center Transmittal of Former Mather AFB, CA, No DoD Action Indicated (NDAI) Explosives Safety Submission (ESS) for Munitions Response Site (MRS) XU403, Practice Bomb Range, letter November 19, 2009 (AR #2976);

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SAFETY CENTER

19 November 2009

MEMORANDUM FOR DDESB-PE

FROM: HQ AFSC/SEW
9700 G Avenue, SE
Kirtland AFB, NM 87117-5670

SUBJECT: Former Mather AFB, CA, No DoD Action Indicated (NDAI) Explosives Safety Submission (ESS) for Munitions Response Site (MRS) XU403, Practice Bomb Range, November 2009

1. The subject ESS at attachment is provided for your review and approval. MRS XU403 has been the subject of an extensive records search to assess potential ordnance issues. Based on the findings of this investigation, no live demolition bombs were believed to have been used at Mather Field and a designation of No DoD Action Indicated (NDAI) is recommended. A 3,000 foot safety zone has been established for XU403 by the Air Force Real Property Agency (AFRPA) in the event that any construction activity takes place. In addition, AFRPA will notify Sacramento County of XU403's designation as a historical bombing range and recommend to county officials that they contact the local police and fire department in the event any munitions debris is found during construction activities in the safety zone.

2. The Former Mather AFB is located in Sacramento County about 10 miles east of Sacramento and partially overlaps the City of Rancho Cordova in California. The base was placed on the Base Realignment and Closure (BRAC) Commission list in 1988 and closed in 1993. The airfield reopened in 1995 as Sacramento Mather Airport. This ESS applies to XU403, a 787-acre former practice bomb range located in the northwest section of Mather that was used in 1931 and 1932 and between 1935 and 1940. In 1998, the *Mather Field Bombing Range Activities Report* concluded that it is highly unlikely live demolition bombs were used at Mather Field. Additional records searches identified two discoveries of practice bombs during trenching and sewer construction activities. One bomb, believed to be practice, disappeared before it was analyzed and the second was filled with sand, and had no spotting charge or fuze attached to it. Based on the information obtained thus far, any remaining munitions debris poses a relatively low risk to human health.

3. Request your review and approval of this NDAI ESS to support closure of MRS XU403. Upon completion of your review, please provide this office with an NDAI ESS approval or advise regarding further actions. If you have any questions, please contact Mr. Mike Lahoff, AFSC/SEWC (Booz Allen Hamilton) at DSN 246-0375 or e-mail john.lahoff@kirtland.af.mil.

MASON.RODNEY.M.1086383680

RODNEY M. MASON, Colonel, USAF
Chief, Weapons Safety

Attachment:
ESS NDAI, XU403, Practice Bomb Range, Former Mather AFB, CA, November 2009

cc:
AFRPA/BPMW (Mr. Doug Fortun)
DDESB-PE (Mr. Tony Dunay)

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

Approval of NDAI ESS for Practice Bomb Range Site XU403 by Department of Defense Explosives Safety Board (DDESB), Letter December 9, 2009 (AR # 2978);

DEPARTMENT OF DEFENSE EXPLOSIVES SAFETY BOARD
2461 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22331-0600

DDESB-PE

DEC 0 9 2009

MEMORANDUM FOR HEADQUARTERS AIR FORCE SAFETY CENTER
ATTENTION: SEW

SUBJECT: DDESB Approval of Former Mather Air Force Base, CA, No Department of Defense Action Indicated Explosives Safety Submission for Munitions Response Site XU403, Practice Bomb Range

References: (a) HQ AFSC/SEW Memorandum of 19 November 2009, Subject: Former Mather AFB, CA, No DoD Action Indicated (NDAI) Explosives Safety Submission (ESS) for Munitions Response Site (MRS) XU403, Practice Bomb Range, November 2009

(b) DoD 6055.09-STD, DoD Ammunition and Explosives Safety Standards, 29 February 2008, Incorporating Change 2, 21 August 2009

The Department of Defense Explosives Safety Board (DDESB) Staff has reviewed the subject explosives safety submission (ESS) forwarded by reference (a) against the requirements of reference (b). Based on the information provided, approval is granted for the No Department of Defense Action Indicated ESS for Munitions Response Site XU403, Practice Bomb Range, Former Mather Air Force Base, Sacramento County, CA

The point of contact for this action is Mr. Tony Dunay, (703) 325-3513, DSN 221-3513, E-mail address: tony.dunay@ddesb.osd.mil.

FOR
CURTIS M. BOWLING
Chairman
DDESB

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

Presence of MMRP Site XU403, Practice Bomb Range at the former Mather Air Force Base, Letter from Philip Mook, AFRPA, to Robert Leonard, County of Sacramento, May 3, 2010 (AR# 2977);

DEPARTMENT OF THE AIR FORCE
AIR FORCE REAL PROPERTY AGENCY

AFRPA Western Region Execution Center
3411 Olson Street
McClellan CA 95652-1003

MAY 0 3 2010

Mr. Robert B. Leonard
Assistant to the County Executive
Economic Development and Intergovernmental Affairs
County of Sacramento
Department of Economic Development
700 H Street, Room 7650
Sacramento CA 95814-1280

Dear Mr. Leonard

Re: Presence of Military Munitions Response Program (MMRP) Site XU403, Practice Bomb Range at the former Mather Air Force Base

This letter is in regards to real property at the former Mather Air Force Base (Mather), known as Parcel A or the Airport Parcel, leased by the Air Force to Sacramento County under Lease Agreement BCA-MAT-13-95-0301. We are hereby notifying Sacramento County of the presence, location, and history of Military Munitions Response Program (MMRP) Site XU403, Practice Bomb Range, within the leased parcel (Figure 1). Please note that there is no evidence that live demolition bombs were ever used at Mather. A brief summary of MMRP Site XU403 is provided in the following paragraphs.

- **XU403, Practice Bomb Range** – Mather was used for aerial gunnery and practice bombing activities at various times between 1918 and 1940. A practice bomb range of 787 acres was located in the northwest portion of Mather and included a majority of the current Runway 22R and the central portion of Runway 22L. No geophysical or other investigation for munitions and explosives of concern (MEC) related to the practice bomb range has been conducted. However, Site XU403 has been the subject of an extensive records search to assess potential ordnance issues.

- In November 2009, the Air Force Safety Center (AFSC) and the Department of Defense Explosives Safety Board (DDESB) approved a No Further Action (NFA) Explosives Safety Submission (ESS) for Site XU403. A designation of NFA was recommended for Site XU403 based on the findings of the extensive records search that demonstrated no evidence that live demolition bombs were ever used at Mather.

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence

- A 3,000-foot practice bomb target safety zone (approximately 621 acres) was established for Site XU403 in the NFA ESS. The safety zone lies entirely within the airport Parcel A, around the location of the only known practice bomb target at Mather. The purpose of the safety zone is to define an adequate boundary within which current and future land owners should be notified of the site's use as a historical practice bomb range. Attached is a figure depicting the 3,000-foot safety zone established for Site XU403 and its relation to Parcel A.

- Some of the practice bombs used at Mather contained a small black powder explosive spotting charge, and while there is no evidence to indicate live demolition bombs were ever used at Mather Field, there is a possibility that practice bombs with spotting charges could be discovered on the property. In the event that any metal object resembling military munitions, or a fragment thereof, is found, the item should not be touched or disturbed further and the local police or fire department should be contacted to report the finding.

Please forward these recommendations to all Sacramento County sub-lessees of property located within the 3,000-foot practice bomb target safety zone. Additional information on MMRP Site XU403 is available upon request or through the Air Force Real Property Agency Administrative Record website located at: *https://afrpaar.lackland.af.mil/ar/*. Please contact me at (916) 643-1250, ext. 100 with any questions or comments.

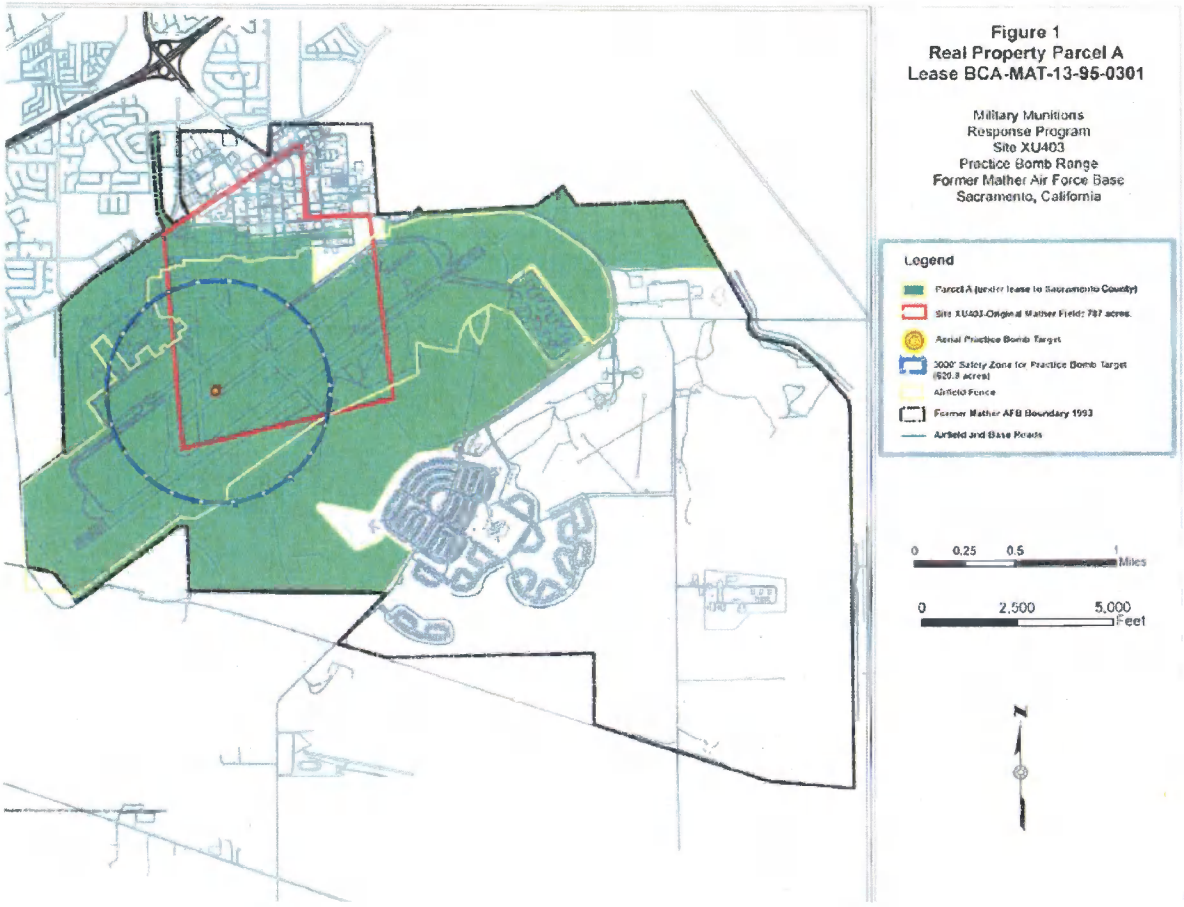
Sincerely,

PHILIP H. MOOK, JR.
Senior Representative

Attachments:
1. Figure 1, Mather Real Property Parcel A Lease BCA-MAT-13-95-0301 Map
2. NFA ESS for Site XU403, Practice Bomb Range

cc:
AFRPA WREC, Attn: Administrative Record File
AFRPA WREC, Attn: Doug Fortun (electronic copy only)
AFRPA WREC, Attn: Linda Geissinger (electronic copy only)
ASE Inc., Attn: Bill Hughes (electronic copy only)
California Department of Toxic Substances Control, Attn: Mr. Franklin Mark
Central Valley Regional Water Quality Control Board, Attn: Mr. Marcus Pierce
DMC, Attn: Ms. Diane Mathein (electronic copy only)
Parsons, Attn: Ms. Molly Enloe (electronic copy only)
Sacramento County Airport System, Attn: Gregg Weissenfluh
U.S. Environmental Protection Agency, Attn: Mr. John Lucey

Attachment 5
MMRP Site XU403, Practice Bomb Range
Documentation/Correspondence



Attachment 6
Regulator and Public Comments

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

July 28, 2011

Mr. Douglas V. Fortun
AFRPA Western Region Execution Center
3411 Olson Street
McClellan CA 95652-1003

Dear Mr. Fortun:

This letter transmits EPA's comments on two documents, the Draft Finding of Suitability to Transfer, and the Draft Supplemental Environmental Baseline Survey, for Parcels A-1, P-1, and P-2 at Former Mather Air Force Base, California", dated May 2011. If you have any questions please call me at (415) 972-3145.

Sincerely,

John Lucey

John Lucey,
Remedial Project Manager
U.S. EPA

cc: Franklin Mark California DTSC
Marcus Pierce California RWQCB

Attachment

Attachment 6
Regulator and Public Comments

EPA comments on the
Draft Finding of Suitability to Transfer, and the
Draft Supplemental Environmental Baseline Survey, for Parcels A-1, P-1, and P-2 at
Former Mather Air Force Base, California; Dated May 2011

1. FOST Section 1.2 should be reviewed and updated with the most current list of documents including new AR#s if available. Also please include EPA's recent OPS concurrence letter.

2. FOST Section 5 should be revised and we should set up a conference call to discuss these changes.

3. The FOST should include new figures that show where ICs will be implemented. The existing figures do not clearly show the boundaries for IC implementation.

4. No comments on the Draft SEB.

Attachment 6
Regulator and Public Comments

California Regional Water Quality Control Board
Central Valley Region
Katherine Hart, Chair

11020 Sun Center Drive, #200, Rancho Cordova, California 95670-6114
(916) 464-3291 • FAX (916) 464-4645
http://www.waterboards.ca.gov/centralvalley

Linda S. Adams
Acting Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

20 July 2011

Mr. Douglas Fortun
AFRPA Western Region Execution Center
3411 Olson Street
McClellan, CA 95652-1003

DRAFT FINDING OF SUITABILITY TO TRANSFER, PARCEL A-1, P-1, AND P-2, FORMER MATHER AIR FORCE BASE (AFB), SACRAMENTO COUNTY

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff has reviewed the Draft Finding of Suitability to Transfer for Parcels A-1, P-1, and P-2 (FOST), submitted on 10 May 2011. The purpose of the FOST is to document environmentally related factors and the suitability to transfer real property and improvements on Parcels A-1, P-1, and P-2. The Central Valley Water Board staff's General and Specific Comments are presented below.

GENERAL COMMENTS

1. The discussion of Operating Properly and Successfully (OPS) Determination in Section 2 should be updated to reflect the recent OPS approval. Similarly, the discussion of the vadose zone remedial action at Site 7/11 should reflect the recent submittal of the Soil Vapor Extraction (SVE) closure report and the pending No Further Action (NFA) Determination for SVE.

2. This agency should be referenced as 'Central Valley Regional Water Quality Control Board' the first time it appears in the text and referenced as 'Central Valley Water Board' thereafter. Please remove the acronyms 'CVRWQCB' and 'RWQCB' from the document.

3. Please consider double-siding the final version of this document.

4. There are several misspelled words in this document (e.g., Section 4.0 on Page 15, third paragraph, second sentence); please run a spell check of the document. Additionally, add a Table of Contents and List of Acronyms to the document.

5. Review the comments on the Draft Supplemental Environmental Baseline Survey, Parcel A-1, P-1, and P-2 and revise the Draft FOST, as appropriate.

California Environmental Protection Agency

Attachment 6
Regulator and Public Comments

SPECIFIC COMMENTS

1. It is not entirely clear from description in Table 5.2A or the text in Section 5.2 (description of land use controls/institutional controls (LUCs/ICs) on Pages 44-50) whether ST-20 requires deed or land use restrictions or has been cleaned up to unrestricted use levels. Please clarify the table or text accordingly. Please also indicate that NFA Approval is needed from the Central Valley Water Board. Additionally, please correct the text on Page 50 to indicate that Site 89 is Installation Restoration Program (IRP) Site OT-89.

2. The acronyms used in Tables 5.4A and 5.4B should be defined. Please update the tables.

3. The text in Section 5.6.1, Military Munitions Response Program (MMRP) Site XU403, Mather Practice Bombing Range, references Attachment 3 Figure 4 which does not exist. Please correct this reference.

   Additionally, the text in Section 5.6.1 contains a description of a 3,000-ft practice bomb target safety zone but does not mention any associated deed or land use restrictions. Please explain why a deed or land use restriction in that area would not be necessary. Please also evaluate whether this safety zone needs to be incorporated in the text in Section 6.0.

4. Correct the editorial error in Section 8.0; the sentence should read 'A copy of the notice is included in Attachment 9' or 'A copy of the notice is included as Attachment 9'. Also correct the typographical error on this page ('INTENTIONALLY' not 'INTENSIONALLY').

5. Attachment 1, Figure 1, Page 69: Use a different shade of red or a different color to identify the IRP sites. As currently shown, the IRP sites are not distinguishable from the Parcel A-1 property map.

6. Attachment 1, Figure 3, Page 71: The outlines of the groundwater plumes in Figure 2 do not appear to coincide with the plume outlines in Figure 3 of Attachment 1. Since Figure 3 is based on more recent data, Figure 2 should be updated.

   Please also define the 'pink' or 'light red' colored plume or shaded area in Figure 3.

   Finally, Figure 3 should be revised as neither the legend nor the figure is currently legible.

7. The Environmental Factors Table in Attachment 2 should define all acronyms.

8. The table in Attachment 3, Notice of Hazardous Substances Stored, contains Building 4473 which is not listed in Table 2.0a, Facilities in Parcel A-1. Please either explain or correct this discrepancy. It is also not clear why some buildings in Table 2.0a were listed as 'hazardous material was known to have been stored in this facility' while others are not identified as such, for example Building 3398, Hazardous Storage.

Attachment 6
Regulator and Public Comments

9. Many of the figures in Attachment 5 are not legible and need to be revised.

10. Attachment 9, FOST Related Notices and Correspondence: Please revise the FOST Public Notice to indicate where the public may obtain a hard copy of the supporting documentation (North Highlands library and/or McClellan Administrative Record).

If you have any questions, please contact me at (916) 464-4821 or email me at cmitterhofer@waterboards.ca.gov.

C. J Mitterhofer

CONNY MITTERHOFER, P.E.
Water Resources Control Engineer
Federal Facilities Unit

cc: Mr. John Lucey, United States Environmental Protection Agency, San Francisco, CA
Mr. Franklin Mark, Department of Toxic Substances Control, Sacramento, CA

Attachment 6
Regulator and Public Comments

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Deborah O. Raphael, Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Edmund G. Brown Jr.
Governor

September 6, 2011

Mr. Douglas V. Fortun
AFRPA Western Region Execution Center
3411 Olson Street
McClellan, California 95652-1003

DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST) AND DRAFT SUPPLEMENTAL ENVIRONMENTAL BASELINE SURVEY (SEBS) FOR PARCELS A-1, P-1, AND P-2, FORMER MATHER AIR FORCE BASE, CALIFORNIA

Dear Mr. Fortun:

The Department of Toxic Substances Control (DTSC) has completed our review of the *"Mather Air Force Base, Draft Finding of Suitability to Transfer, Parcel A-1, P-1, and P-2"* and *"Draft Supplemental Environmental Baseline Survey for Parcel A-1, P-1, and P-2, Former Mather Air Force Base, California,"* both dated May 9, 2011.

The attached comments should be responded to or resolved in the draft final version of the FOST and SEBS documents.

If you have any questions, please contact me at (916) 255-3584 or e-mail at FMark@dtsc.ca.gov.

Sincerely,

Franklin Mark

Franklin Mark
Hazardous Substances Engineer
Sacramento Office
Brownfields and Environmental Restoration Program

Attachment

cc: See next page

RECEIVED
SEP 07 2011

Attachment 6
Regulator and Public Comments

cc: Mr. John Lucey
United States Environmental Protection Agency
Region IX
75 Hawthorne Street, Mail SFD-8-1
San Francisco, California 94105

Mr. Marcus L. Pierce
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, # 200
Rancho Cordova, California 95670-6114

Mr. William T. Hughes
ASE Inc.
c/o AFRPA / Western REC
3411 Olsen Street
McClellan, California 95652-1003

Attachment 6
Regulator and Public Comments

COMMENTS ON THE DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST), AND DRAFT SUPPLEMENTAL ENVIRONMENTAL BASELINE SURVEY (SEBS) FOR PARCEL A-1, P-1, and P-2, FORMER MATHER AIR FORCE BASE, CA

References:

(a) Revised Final Explanation of Significant Differences from the Record of Decision for Soil Operable Unit Sites and Groundwater Operable Unit Plumes, February 2010
(b) Final Explanation of Significant Differences from the Record of Decision for Basewide Operable Unit Sites, June 2010

General Comment:

1. The figures or maps shown in Attachment 1 need to enlarge. The site and legend information depicted on the various maps has a small font size and is not legible. For Figure 4 (page 72), the institutional control (IC) boundary is not shown for Site 89 and the 1000 foot buffer zone IC boundary for Site 7/11 and Landfill 3.

2. The SEBS for Parcel A-1, P-1, and P-2 does not have page numbers listed.

Specific Comment:

3. FOST, Section 2.0 (page 4) states that "Photographs of the Property can be found in the VSI reports in Attachment 7 of the SEBS." The VSI reports in the SEBS do not contain any photographs of facilities or property. Comment also applies to SEBS, Section 3.0.

4. FOST, Section 5.2, page 17: Please correct the following, "~~Since the EBS,~~ In accordance with the above mentioned RODs and ESDs to these RODS, soil contamination source area removal...."

5. FOST, Table 5.2A (page 26) states that there are portions of the groundwater plume beyond the capture of the extractions system "as identified in the 2009 capture zone analysis reports (references 47, 48, and 49)." Please check reference citations because the Final Capture-Zone Analysis Report for the Southwest Lobe of the Main Base/SAC Area Plume (2009) is reference 37. Comment also applies to SEBS, Table 5.3A (Main Base/SAC area Plume).

6. FOST, Table 5.3B, page 31 (Site RW-16): The site descriptions states that "approximately sixty low-level radioactive electron tubes were reportedly buried in 15-foot auger holes" and that there will be a "deed notification to warn future landowners will that any excavation at the site should proceed with caution to avoid inadvertent exposure to broken concrete containers and/or electron tubes." The Environmental Factors Table (page 73) only has notification required for

Attachment 6
Regulator and Public Comments

radioactive and mixed waste. Please explain why a deed or land use restriction for Site RW-16 would not be necessary.

7. FOST, Section 5.2, page 46: The section does not discuss requiring a covenant in the deed of transfer that allows for the State to have access to the property with ICs (see page 16, Draft Final Parcel G FOST (August 2011)).

8. FOST, Section 5.2, page 50: The section states that the areas to which the Site 89 institutional controls apply are provided in Attachment 1, Figure 4. Site 89 is not shown in Attachment 1, Figure 4.

9. FOST, Section 5.9 and 5.10, page 62: Were there any LBP surveys performed on existing buildings that were constructed prior to 1978 or soil samples analyze for lead in areas where building (constructed prior to 1978) were demolished?

10. FOST, Section 5.13, page 64: The section states that the Air Force has agreed to evaluate indoor air risk for the remaining active IRP sites and that the results of those evaluations will be presented in site closure reports. Currently, the regulatory agencies have received site closure reports for Sites 10C/68, 18/23A, and Site 7/11. References (a) and (b) state that shallow soil gas sampling for the contaminants of concerns (for SVE IRP sites) must take place prior to property transfer. Does the Air Force plan on submitting the remaining SVE site closure reports prior to the property transfer of Parcels A-1? Does the Air Force plan on taking shallow soil gas samples to evaluate potential indoor air risk from shallow soil gas at these IRP sites?

11. FOST, Attachment 9, page 124: The public notice states that 2,046 acres vice 2,048 acres of land will be transferred by deed to Sacramento County and that the A-1 parcel will be used as a park.

Attachment 6
Regulator and Public Comments

EPA comments on the
Draft Final Finding of Suitability to Transfer, Parcels A-1, P-1, and P-2, Mather Air Force Base, California; Dated October 2011

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

November 29, 2011

Mr. Douglas V. Fortun
AFRPA Western Region Execution Center
3411 Olson Street
McClellan CA 95652-1003

Dear Mr. Fortun:

This letter transmits EPA's comments on the "Draft Final Finding of Suitability to Transfer, for Parcels A-1, P-1, and P-2, Mather Air Force Base", dated October 2011. If you have any questions please call me at (415) 972-3145.

Sincerely,

John Lucey,
Remedial Project Manager
U.S. EPA

John Lucey

cc: Franklin Mark California DTSC
Conny Mitterhofer California RWQCB

Attachment

Attachment 6
Regulator and Public Comments

Comment 1 –

The FOST should have a Table of Contents (TOC).

Comment 2 – Section 5.2.1

The accounting of sites in this section seems incorrect because the number of sites described in the text does not correlate to the number of sites in Table 5.2A and 5.2B. In addition, this section says the following; there are 42 IRP sites; there are a number of NFA sites selected in RODs, a number of sites where the remedial action is complete and NFA was selected, some sites with on-going remedies, and some with ICs. This gets confusing when there are two types of NFA sites and I'm not sure if there are any closed sites where the remedy requires ICs. Please include a list or table showing all the different types of sites in the FOST.

Comment 3 – Section 5.2.1

This section should define NFA. It appears that NFA could mean that the site was evaluated in the RI/FS and the associated ROD selected NFA because no contamination was discovered. Or NFA was determined in the closure report because the remedial action achieved the cleanup goals.

Comment 4 - Table 5.2A

The FOST should include a list or table including all the sites that require ICs and provide the following:

Parcel name

OU where site is located

Site name

Site description

Selected Remedy

Describe if ICs are required and provide a summary if applicable List of documents/AR#s where the ICs are described. (The lists of documents could include multiple documents i.e. ROD, ESD, SROD, draft BO (or final BO) wetlands management plan (WMP), conservation easement, MMRP closure reports, county requirements etc.)

Current status of remedy from the 5 Year Review

List of other important docs/AR#s including RI/FS and remedy completion docs

Attachment 6
Regulator and Public Comments

Comment 5 – Section 5.2.2.

On page 37 of 136 section 5.2.2 is incorrect as 5.22.

Comment 6 – Section 5.2.2.

This section should have subsections for the various individual sites with titles that show up in the TOC.

Comment 7 – Section 5.2.2.

Please reference the source documents (with AR#s) for the ICs presented in this section. Please explain that the RODs and ESDs describe the ICs and other requirements that need to be included in the deeds.

Comment 8 – Section 5.2.2.

The FOST should provide and reference the figures from the ESDs that show the IC boundaries.

Comment 9 – Section 5.6.

Section 5.6 describes three MMRP sites that require deed notifications and ICs. Please explain where the original deed notifications are and IC requirements are documented or described.

Comment 10 – Section 5.6.

The ICs and deed notifications required for the three MMRP sites should show up in the new list/table for Sites that require ICs. Please reference the IC site list/table in each subsection.

Comment 11 – Section 5.7.

It is confusing to say that radioactive waste is reportedly present at RW-16. Perhaps to say that historic documentation showed the possibility of radioactive waste but the RI/FS showed no contamination. The IC site list/table should show the notification requirement for Site RW-16.

Comment 12 – Section 5.8.

The FOST says that based on the VSI and a review of the Basewide EBS, the ACM in some structures creates a potential risk of airborne fibers and covenants will be included in the deed. The FOST should include a list of all facilities that require covenants for ACM.

Comment 13 – Section 5.9.

The FOST should include the standard AF & EPA "agree to disagree" language concerning LBP.

Comment 14 – Section 5.16.

This section generically says that parcel A-1 contains biological resources. It should also explain where the biological resources are located and how the location was determined. Also provide a reference to any maps and or reports that describe where biological resources are located. Also describe which sites (IRP and MMRP) include biological resources.

Attachment 6
Regulator and Public Comments

Comment 15-Section 5.16.
Please provide a better description applicable documents including; the SROD, the draft BO, the final BO; the wetlands management plan, the conservation easement, previous wetlands/endangered species studies and reports, ACOE wetlands determinations.

State of California Central Valley Regional Water Quality Control Board (CVWB) comments on the
Draft Final Finding of Suitability to Transfer, Parcels A-1, P-1, and P-2, Mather Air Force Base, California; Dated October 2011

-----Original Message-----
From: Conny Mitterhofer
[mailto:cmitterhofer@waterboards.ca.gov] Sent: Monday,
December 05, 2011 2:16 PM
To: FORTUN, DOUGLAS V GS-12 USAF AFRPA AFRPA/BPMW
Cc: William [USA] (ASE) Hughes; Franklin Mark;
Lucey.John@epamail.epa.gov; Marcus Pierce
Subject: Re: Draft Final Parcels A-1, P-1 and P-2 FOST, former Mather Air Force Base - Comments Due

Good afternoon Doug,

I reviewed the Response to Comments for the Parcel A-1, P-1, and P-2 FOST and SEBS and have no additional comments.

thank you
Conny Mitterhofer
Water Resource Control Engineer
(916) 464-4821

Attachment 6
Regulator and Public Comments

DTSC comments on the Draft Final Finding of Suitability to Transfer, Parcels A-1, P-1, and P-2, Mather Air Force Base, California; Dated October 2011

Department of Toxic Substances Control

Deborah O. Raphael, Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Matthew Rodriquez
Acting Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

December 22, 2011

Mr. Douglas V. Fortun
AFRPA Western Region Execution Center
3411 Olson Street
McClellan, California 95652-1003

DRAFT FINAL FINDING OF SUITABILITY TO TRANSFER (FOST) AND SUPPLEMENTAL ENVIRONMENTAL BASELINE SURVEY (SEBS) FOR PARCEL A-1, P-1, AND P-2, FORMER MATHER AIR FORCE BASE, CALIFORNIA

Dear Mr. Fortun:

The Department of Toxic Substances Control (DTSC) has completed our review of the "*Draft Final Finding of Suitability to Transfer, Parcels A-1, P-1, and P-2*" and "*Draft Final Supplemental Environmental Baseline Survey, Parcels A-1, P-1 and P-2*" dated October 2011.

With the exception to comment 6, previous comments provided on the draft document appear to have been adequately addressed. In regards to the response to comment 6, DTSC does not agree with the Air Force that a deed notification to warn future landowners (that any excavation at the site should proceed with caution to avoid inadvertent exposure to broken concrete containers and/or electron tubes) is sufficiently protective. DTSC would require a digging restriction for Site RW-16 in any State Land Use Covenant for Parcel A-1. Also, the Air Force should have language within the FOST (and subsequent deed) that states that the Air Force will undertake the appropriate response or corrective actions necessary to address potential radioactive waste disposed of on the property should concrete containers and/or electron tubes be discovered in the future.

Attachment 6
Regulator and Public Comments

If you have any questions, please contact me at (916) 255-3584 or e-mail at FMark@dtsc.ca.gov.

Sincerely,

Franklin Mark

Franklin Mark
Hazardous Substances Engineer
Sacramento Office
Brownfields and Environmental Restoration Program

cc: Mr. John Lucey
United States Environmental Protection Agency
Region IX
75 Hawthorne Street, Mail SFD-8-1
San Francisco, California 94105

Ms. Conny Mitterhofer
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, # 200
Rancho Cordova, California 95670-6114

Mr. William T. Hughes
ASE Inc.
c/o AFRPA / Western REC
3411 Olsen Street
McClellan, California 95652-1003

Attachment 7
AFRPA Responses to Regulator and Public Comments

AFRPA Response to U.S. EPA Comments on Draft FOST for Parcels A-1, P-1, and P-2

EPA comments on the
Draft Finding of Suitability to Transfer for Parcel A-1, P-1, and P-2,
Former Mather Air Force Base, California; Dated May 2011

1. **EPA:** FOST Section 1.2 should be reviewed and updated with the most current list of documents including new AR#s if available. Also please include EPA's recent OPS concurrence letter.

   Air Force Response: The reference list in Section 1.2 contains the most recent relevant documents used to prepare the FOST. The recent EPA OPS letter has been added to the list.

2. **EPA:** FOST Section 5 should be revised and we should set up a conference call to discuss these changes.

   Air Force Response: AFRPA and USEPA participated in a conference call on August 4, 2011, as requested.

3. **EPA:** The FOST should include new figures that show where ICs will be implemented. The existing figures do not clearly show the boundaries for IC implementation.

   Air Force Response: Attachment 1, Figure 4 shows boundaries for soil-related ICs. The text has been revised to refer the reader to the RODs and ESDs for more detail on the ICs and the areas to which they apply.

Attachment 7
AFRPA Responses to Regulator and Public Comments

AFRPA Response to
State of California Central Valley Regional Water Quality Control Board (CVWB) Comments
on Draft FOST for Parcels A-1, P-1, and P-2

CVWB comments on the
Draft Finding of Suitability to Transfer for Parcel A-1, P-1, and P-2,
Former Mather Air Force Base, California; Dated May 2011

GENERAL COMMENTS

1. **CVWB:** The discussion of Operating Properly and Successfully (OPS) Determination in Section 2 should be updated to reflect the recent OPS approval. Similarly, the discussion of the vadose zone remedial action at Site 7/11 should reflect the recent submittal of the Soil Vapor Extraction (SVE) closure report and the pending No Further Action (NFA) Determination for SVE.

   Air Force Response: The requested updates have been added, although the first mention of Operating Properly and Successfully (OPS) Determination and of the Site 7/11 closure is in Section 4.

2. **CVWB:** This agency should be referenced as 'Central Valley Regional Water Quality Control Board' the first time it appears in the text and referenced as 'Central Valley Water Board' thereafter. Please remove the acronyms 'CVRWQCB' and 'RWQCB' from the document.

   Air Force Response: The requested changes have been made.

3. **CVWB:** Please consider double-siding the final version of this document.

   Air Force Response: The Air Force will consider double siding where practical.

4. **CVWB:** There are several misspelled words in this document (e.g., Section 4.0 on Page 15, third paragraph, second sentence); please run a spell check of the document. Additionally, add a Table of Contents and List of Acronyms to the document.

   Air Force Response: A spell check has been performed. A Table of Contents and a List of Acronyms have been added to the document.

5. **CVWB:** Review the comments on the Draft Supplemental Environmental Baseline Survey, Parcel A-1, P-1, and P-2 and revise the Draft FOST, as appropriate.

   Air Force Response: Comments on both the Draft FOST and on the Draft SEBS have been considered during revision of each document.

Attachment 7
AFRPA Responses to Regulator and Public Comments

SPECIFIC COMMENTS

1. **CVWB:** It is not entirely clear from description in Table 5.2A or the text in Section 5.2 (description of land use controls/institutional controls (LUCs/ICs) on Pages 44-50) whether ST-20 requires deed or land use restrictions or has been cleaned up to unrestricted use levels. Please clarify the table or text accordingly. Please also indicate that NFA Approval is needed from the Central Valley Water Board. Additionally, please correct the text on Page 50 to indicate that Site 89 is Installation Restoration Program (IRP) Site OT-89.

   Air Force Response: The descriptions in the table have been updated to clarify that no ICs are required for Site ST-20, that satisfaction of the ROD requirements for site closure have been documented in a remedial action report (AR# 2994), and that AFRPA is still waiting for concurrence from U.S. EPA and the State. However, as the documentation of closure was finalized without controversy the site is now listed with the closed sites. It is anticipated that regulatory concurrence will have been received prior to the final FOST and that ST-20 will be removed from Table 5.2A.

2. **CVWB:** The acronyms used in Tables 5.4A and 5.4B should be defined. Please update the tables.

   Air Force Response: A List of Acronyms has been added to the document.

3. **CVWB:** The text in Section 5.6.1, Military Munitions Response Program (MMRP) Site XU403, Mather Practice Bombing Range, references Attachment 3 Figure 4 which does not exist. Please correct this reference.

   Additionally, the text in Section 5.6.1 contains a description of a 3,000-ft practice bomb target safety zone but does not mention any associated deed or land use restrictions. Please explain why a deed or land use restriction in that area would not be necessary. Please also evaluate whether this safety zone needs to be incorporated in the text in Section 6.0.

Attachment 7
AFRPA Responses to Regulator and Public Comments

Air Force Response: The text reference in Section 5.6.1 has been corrected. The text has also been clarified to explain that no land-use restrictions are necessary as there is no evidence that live ordnance was used during practice bomb practice, but that notification will be provided for property within 3000 feet of the only known practice bombing target, as required by the November 2009 No Further Action (NFA) Explosives Safety Submission (ESS) for Site XU403 that was approved by the Air Force Safety Center (AFSC) and the Department of Defense Explosives Safety Board (DDESB) . The purpose of the safety zone is to define an adequate boundary within which current and future land owners should be notified of the site's use as a historical practice bombing range.

4. **CVWB**: Correct the editorial error in Section 8.0; the sentence should read 'A copy of the notice is included in Attachment 9' or 'A copy of the notice is included as Attachment 9'. Also correct the typographical error on this page ('INTENTIONALLY' not 'INTENSIONALLY').

Air Force Response: The requested corrections have been made. Note however that use of the word "at" reflects a common usage that originated when tabs were used to separate attachments, hence the statement that a copy of the notice is found at Attachment 9.

5. **CVWB:** Attachment 1, Figure 1, Page 69: Use a different shade of red or a different color to identify the IRP sites. As currently shown, the IRP sites are not distinguishable from the Parcel A-1 property map.

Air Force Response: The requested revisions have been made.

6. **CVWB**: Attachment 1, Figure 3, Page 71: The outlines of the groundwater plumes in Figure 2 do not appear to coincide with the plume outlines in Figure 3 of Attachment 1. Since Figure 3 is based on more recent data, Figure 2 should be updated.

   Please also define the 'pink' or 'light red' colored plume or shaded area in Figure 3.

   Finally, Figure 3 should be revised as neither the legend nor the figure is currently legible.

Air Force Response: The requested revisions have been made, except that no further definition was added as the pink colored plume was already defined in Figure 3. Please note that the electronic version of the FOST provided for review had lower-resolution graphics and that the hard copy report also provided had more legible legend and label text.

7. **CVWB**: The Environmental Factors Table in Attachment 2 should define all acronyms.

Air Force Response: A List of Acronyms has been added to the document.

Attachment 7
AFRPA Responses to Regulator and Public Comments

8. **CVWB**: The table in Attachment 3, Notice of Hazardous Substances Stored, contains Building 4473 which is not listed in Table 2.0a, Facilities in Parcel A-1. Please either explain or correct this discrepancy. It is also not clear why some buildings in Table 2.0a were listed as 'hazardous material was known to have been stored in this facility' while others are not identified as such, for example Building 3398, Hazardous Storage.

   Air Force Response: Building 4473 no longer exists, and hence is not listed in Table 2.0a. The column in Table 2.0a lists hazardous materials, and the table may have been populated using this term to exclude hazardous waste. Hazardous waste storage occurred under RCRA and was tracked as a separate category in the EBS. FOST Table 2.0a has been revised to add a "Yes" in this column for the RCRA treatment, storage and disposal facilities, including satellite accumulation points, so this category now includes both hazardous materials and hazardous wastes under the heading of hazardous materials.

9. **CVWB**: Many of the figures in Attachment 5 are not legible and need to be revised.

   Air Force Response: The figures have been revised where possible to increase legibility. Please note that the electronic version of the FOST provided for review had lower-resolution graphics and that the hard copy report also provided had more legible legend and label text.

10. **CVWB**: Attachment 9, FOST Related Notices and Correspondence: Please revise the FOST Public Notice to indicate where the public may obtain a hard copy of the supporting documentation (North Highlands library and/or McClellan Administrative Record).

Air Force Response: The FOST and most supporting documentation will be viewable on line or at the AFRPA office at McClellan. Note that documents supporting Mather are not considered the McClellan Administrative Record, but rather the Mather Administrative Record.

Attachment 7
AFRPA Responses to Regulator and Public Comments

AFRPA Response to
State of California Department of Toxic Substances Control (DTSC)
Comments
on Draft FOST for Parcels A-1, P-1, and P-2

DTSC comments on the
Draft Finding of Suitability to Transfer for Parcel A-1, P-1, and P-2,
Former Mather Air Force Base, California; Dated May 2011

GENERAL COMMENTS

1. **DTSC**: The figures or maps in Attachment 1 need to enlarge. The site and legend information depicted on the various maps has a small font size and is not legible. For Figure 4 (page 72), the institutional control (IC) boundary is not shown for Site 89 and the 1000 foot buffer zone IC boundary for Site 7/11 and Landfill 3.

   Air Force Response: The figures have been enlarged as requested. Figure 4 has been corrected to show IC boundaries for Site 89 and the landfill buffer zones for SiteWP-7 and for Site LF-03. Please note that the electronic version of the FOST provided for review had lower-resolution graphics and that the hard copy report also provided had more legible legend and label text.

2. **DTSC**: The SEBS for Parcel A-1, P-1, and P-2 does not have page numbers listed.

   Air Force Response: Page numbers have been added to the SEBS.

SPECIFIC COMMENTS

3. **DTSC**: FOST, Section 2.0 (page 4) states that "Photographs of the Property can be found in the VSI reports in Attachment 7 of the SEBS." The VSI reports in the SEBS do not contain any photographs of facilities or property. Comment also applies to SEBS, Section 3.0.

   Air Force Response: Photographs were removed from the electronic copy to reduce the file size. The VSI reports including photographs are now included on a CD with the hard copy of the SEBS.

4. **DTSC**: FOST, Section 5.2, page 17: Please correct the following, "~~Since the EBS,~~ In accordance with the above mentioned RODs and ESDs to these RODS, soil contamination source area removal...."

   Air Force Response: The text has been revised.

Attachment 7
AFRPA Responses to Regulator and Public Comments

5. **DTSC**: FOST, Table 5.2A (page 26) states that there are portions of the groundwater plume beyond the capture of the extractions system "as identified in the 2009 capture zone analysis reports (references 47, 48, and 49)." Please check reference citations because the Final Capture-Zone Analysis Report for the Southwest Lobe of the Main Base/SAC Area Plume (2009) is reference 37. Comment also applies to SEBS, Table 5.3A (Main Base/SAC area Plume).

   Air Force Response: The references have been corrected to 37 and 41. Note that the 2009 capture-zone analysis updates for the Main Base/SAC Area and Site 7 plumes are contained in appendices of the 2008 annual groundwater monitoring report, reference 41.

6. **DTSC**: FOST, Table 5.3B, page 31 (Site RW-16): The site descriptions states that "approximately sixty low-level radioactive electron tubes were reportedly buried in 15-foot auger holes" and that there will be a "deed notification to warn future landowners ~~will~~ that any excavation at the site should proceed with caution to avoid inadvertent exposure to broken concrete containers and/or electron tubes." The Environmental Factors Table (page 73) only has notification required for radioactive and mixed waste. Please explain why a deed or land use restriction for Site RW-16 would not be necessary.

   Air Force Response: The ROD did not select a land-use restriction for this site because it is not believed that the site presents risk to human health or the environment. A deed notification to future landowners was judged sufficient precaution against inadvertent exposure should excavation be conducted and buried electron tubes encountered.

7. **DTSC**: FOST, Section 5.2, page 46: The section does not discuss requiring a covenant in the deed of transfer that allows for the State to have access to the property with ICs (see page 16, Draft Final Parcel G FOST (August 2011)).

   Air Force Response: The text has been revised to include the same covenant description that was included in the Draft Final Parcel G FOST. Additional text describing maintenance of access is found on or about page 38, "The ICs prohibit installation of groundwater wells for purposes other than remediation and monitoring, prohibit interference with the remedy components, and maintain rights of access for the Air Force and regulatory agencies for the purpose of environmental cleanup." Specific covenant language is presented on or about pages 41 and 44, "*The Grantee covenants and agrees for itself and its successors and assigns that it will not engage in, or allow others to engage in, any activities that would limit access for the USAF, the USEPA, and the State, and their respective officials, agents, employees, contractors, and subcontractors to any equipment/ facilities/ infrastructure associated with the remediation system components used in soil remediation on the Property.*"

Attachment 7
AFRPA Responses to Regulator and Public Comments

8. **DTSC**: FOST, Section 5.2, page 50: The section states that the areas to which the Site 89 institutional controls may apply are provided in Attachment 1, Figure 4. Site 89 is not shown in Attachment 1, Figure 4.

Air Force Response: Figure 4 has been corrected to show the Site 89 IC area.

9. **DTSC**: FOST, Section 5.9 and 5.10, page 62: Were there any LBP surveys performed on existing buildings that were constructed prior to 1978 or soil samples analyzed for lead in areas where building (constructed prior to 1978) were demolished?

Air Force Response: The Air Force has no LBP surveys pertaining to existing buildings that were constructed prior to 1978. Such surveys may have been done when Mather was an active base. For the purposes of disposing of land and improvements on closed bases, the Air Force does not generally perform any new LBP surveys for improvements or the around older improvements because deed recipients accept the land and improvements "as is." As section 5.9 and 5.10 state, the Air Force deeds will contain notifications and warnings about LBP. Also, the Air Force will appropriately respond to any newly discovered LBP in soils that is the result of Air Force activities/improvements.

While researching in order to prepare this FOST, the Air Force discovered data for only three buildings in Parcel A-1 or the Parcel Ps. Building 3494 was found to have LBP, and was subsequently demolished. Facilities 7005 and 7024 were found to have lead in soil at the drip line of the improvements with average concentrations of 240 and 259 mg/kg, respectively, which is not actionable. No records were found of lead surveys after buildings were demolished. However, LBP surveys have been undertaken by the County in association with its demolition projects.

10. **DTSC**: FOST, Section 5.13, page 64: The section states that the Air Force has agreed to evaluate indoor air risk for the remaining active IRP sites and that the results of those evaluations will be presented in site closure reports. Currently, the regulatory agencies have received site closure reports for Sites 10C/68, 18/23A, and Site 7/11. References (a) and (b) state that shallow soil gas sampling for the contaminants of concerns (for SVE IRP sites) must take place prior to property transfer. Does the Air Force plan on submitting the remaining SVE site closure reports prior to the property transfer of Parcels A-1? Does the Air Force plan on taking shallow soil gas samples to evaluate potential indoor air risk from shallow soil gas at these IRP sites?

Air Force Response: The text of the 2010 ESDs for the Basewide OU and for the Soil and Groundwater OUs state that shallow soil gas sampling for specified sites must take place prior to transferring property. The ESDs do not state when this sampling must occur or that new sampling must occur. The Air Force does not intend to collect additional soil gas data prior to transferring property. Although evaluations of

Attachment 7
AFRPA Responses to Regulator and Public Comments

residual soil gas are planned for the future to provide the supporting data for site closure, site remediation is not expected to result in cleanup compatible with unrestricted use/unrestricted exposure before the planned transfer of these sites. For the purposes of transferring property, if existing, historical data indicates that soil vapor or residual contamination is a potential threat to human health or the environment, then the Air Force will include the appropriate ICs in its deed(s).

11. DTSC: FOST, Attachment 9, page 124: The public notice states that 2,046 acres vice 2,048 acres of land will be transferred by deed to Sacramento County and that the A-1 parcel will be used as a park.

Air Force Response: The public notice has been corrected.

Attachment 7
AFRPA Responses to Regulator and Public Comments

AFRPA Response to Comments
On the Draft Final FOST for Parcels A-1, P-1, and P-2
Mather Air Force Base, California; Dated October 2011

EPA comments (*received 29 November 2011; revised comment 13 received 9 January 2012*)

1. **EPA:** The FOST should have a Table of Contents (TOC).

   Air Force Response: The Draft FOST did have a table of contents.

2. **EPA:** Section 5.2.1: The accounting of sites in this section seems incorrect because the number of sites described in the text does not correlate to the number of sites in Table 5.2A and 5.2B. In addition, this section says the following; there are 42 IRP sites; there are a number of NFA sites selected in RODs, a number of sites where the remedial action is complete and NFA was selected, some sites with on-going remedies, and some with ICs. This gets confusing when there are two types of NFA sites and I'm not sure if there are any closed sites where the remedy requires ICs. Please include a list or table showing all the different types of sites in the FOST.

   Air Force Response: The site tally in the text has been corrected so that the three groundwater plumes are not counted as sites. There are a total of 39 sites and 3 plumes on the subject property. The text has been revised to clarify that sites with ICs are listed in Table 5.2A.

3. **EPA:** Section 5.2.1: This section should define NFA. It appears that NFA could mean that the site was evaluated in the RI/FS and the associated ROD selected NFA because no contamination was discovered. Or NFA was determined in the closure report because the remedial action achieved the cleanup goals.

   Air Force Response: The term NFA is now defined in the text. The use of NFA has been restricted to remedy selection of No Further Action in RODs. Sites where post-ROD or non-CERCLA cleanup took place and was completed successfully are now identified as "closed."

4. **EPA:** Table 5.2A:
   The FOST should include a list or table including all the sites that require ICs and provide the following:
   - Parcel name
   - OU where site is located
   - Site name
   - Site description
   - Selected Remedy
   - Describe if ICs are required and provide a summary if applicable

Attachment 7
AFRPA Responses to Regulator and Public Comments

- List of documents/AR#s where the ICs are described. (The lists of documents could include multiple documents i.e. ROD, ESD, SROD, draft BO (or final BO) wetlands management plan (WMP), conservation easement, MMRP closure reports, county requirements etc.)
- Current status of remedy from the 5 Year Review
- List of other important docs/AR#s including RI/FS and remedy completion docs

Air Force Response: Table 5.2A lists all the sites and plumes on the subject property requiring ICs. This table includes most of what is requested in the comment. A description of ICs is provided in the text of Section 5.2. The status of the remedies is provided in the table, but without specifically referencing the last 5-year review report. Adequate references are listed in Section 1.2, and the text describing ICs identifies the decision document that requires the described ICs.

5. **EPA**: Section 5.2.2. On page 37 of 136 section 5.2.2 is incorrect as 5.22.

Air Force Response: The Section number has been corrected.

6. **EPA**: Section 5.2.2. This section should have subsections for the various individual sites with titles that show up in the TOC.

Air Force Response: The text is arranged by operable unit as this is the way the information is organized in the source documents. Organizing by site would require redundant descriptions of land-use restrictions and document references.

7. **EPA**: Section 5.2.2. Please reference the source documents (with AR#s) for the ICs presented in this section. Please explain that the RODs and ESDs describe the ICs and other requirements that need to be included in the deeds.

Air Force Response: Reference to the documents requiring and describing the ICs is now provided in the text. The relevant decision documents (e.g., RODs and ESDs) contain provisions to implement, monitor, maintain, and enforce the described ICs, as well as to require the imposition of State Land Use Covenants (SLUCs). Some of these requirements will be included in the deeds. Some of the requirements will be included in the SLUCs.

8. **EPA**: Section 5.2.2. The FOST should provide and reference the figures from the ESDs that show the IC boundaries.

Air Force Response: A general map showing IC boundaries is provided in the FOST as well as references to the documents describing the IC boundaries. The individual figures will not be reproduced in the FOST.

Attachment 7
AFRPA Responses to Regulator and Public Comments

9. **EPA:** Section 5.6. Section 5.6 describes three MMRP sites that require deed notifications and ICs. Please explain where the original deed notifications are and IC requirements are documented or described.

Air Force Response: Two of the three sites require deed notifications and/or ICs. Reference to the document requiring and describing the notification for XU 403 are is now provided in the text. Section 5.6 refers to Section 5.2.2 for information on ICs at Site OT-89.

10. **EPA:** Section 5.6. The ICs and deed notifications required for the three MMRP sites should show up in the new list/table for Sites that require ICs. Please reference the IC site list/table in each subsection.

Air Force Response: A new table was not created. IRP sites with ICs are identified in Table 5.2A. The MMRP site with ICs is OT-89 and is listed in Table 5.2A. The other MMRP site requiring notification is XU 403; the notification requirement is described in Section 5.6.

11. **EPA:** Section 5.7. It is confusing to say that radioactive waste is reportedly present at RW-16. Perhaps to say that historic documentation showed the possibility of radioactive waste but the RI/FS showed no contamination. The IC site list/table should show the notification requirement for Site RW-16.

Air Force Response: The statement uses the wording found in the ROD, which reflects the wording of the Records Search report to describe the possible presence of buried electron tubes. The notification commitment is described in the text. Site RW-16 was evaluated in the RI/FS and the associated ROD selected NFA for the site. At that time, the cleanup team concluded that there would be no significant health risk from exposure to any concrete-encased electron tubes that might be buried at the site. Because there is no IC associated with RW-16, the Air Force has not included the site in Table 5.2A. Notifications in deeds are not the same as ICs/environmental restrictive covenants in deeds.

12. **EPA:** Section 5.8. The FOST says that based on the VSI and a review of the Basewide EBS, the ACM in some structures creates a potential risk of airborne fibers and covenants will be included in the deed. The FOST should include a list of all facilities that require covenants for ACM.

Air Force Response: Covenants will be included for all facilities confirmed or suspected of containing ACM. These facilities are identified in Tables 2.0a, 2.0b, and 2.0c.

13. **EPA (revised):** Comment 13 – Section 5.9 and 5.10. Sections 5.9 and 5.10, page 58 of 136; Since there has been no sampling for LBP, there must be a restriction on residential land use unless the Transferee can demonstrate that LBP

Attachment 7
AFRPA Responses to Regulator and Public Comments

has been investigated and addressed based on the standards established pursuant to Title X.

Air Force Response: Non-concur. As there is no target housing on the Property, Title X does not apply and no residential use restriction will be placed on the Property. The Air Force would never routinely sample and entire parcel without some likelihood of finding actionable levels of LBP in the soils. It was assumed that the all structures on the Parcel constructed prior to 1979 contain LBP due to their age and the appropriate notice will be given in the deed. These structures are not suitable for occupation by sensitive receptors. The Air Force remains responsible after conveyance of the Parcel for discoveries of LBP in soils at levels that it determines are actionable.

As was done for the Parcel A-2 FOST, Section 6 of this FOST has been revised to refer the reader to Attachment 5 and mention that there is an unresolved comment. This table of responses to additional comments has been added to Attachment 5.

14. **EPA:** Section 5.16. This section generically says that parcel A-1 contains biological resources. It should also explain where the biological resources are located and how the location was determined. Also provide a reference to any maps and or reports that describe where biological resources are located. Also describe which sites (IRP and MMRP) include biological resources.

Air Force Response: Section 5.16.1 of the FOST has been revised to clarify that threatened and endangered species are associated with the vernal pool and wetland habitats on the parcel. References to the most recent wetlands delineation and the Mather Field Natural Resources Assessment were added to each subsection of Section 15.6 as applicable. Figure 1 of the FOST shows the locations of creeks and wetlands on the Property with respect to IRP sites. Note that none of the active IRP Sites have significant biological resources. There are wetlands within the 3000-foot notification radius for MMRP Site XU 403.

15. **EPA:** Section 5.16. Please provide a better description applicable documents including; the SROD, the draft BO, the final BO; the wetlands management plan, the conservation easement, previous wetlands/endangered species studies and reports, ACOE wetlands determinations.

Air Force Response: The FOST has been revised to reference each applicable document in the text and provide a brief description of the document as it pertains to Parcel A-1.

Attachment 7
AFRPA Responses to Regulator and Public Comments

AFRPA Response to Comments
On the Draft Final FOST for Parcels A-1, P-1, and P-2
Mather Air Force Base, California; Dated October 2011

DTSC comment (*received 22 December 2011*)

1. **DTSC:** With the exception to comment 6, previous comments provided on the draft document appear to have been adequately addressed. In regards to the response to comment 6, DTSC does not agree with the Air Force that a deed notification to warn future landowners (that any excavation at the site should proceed with caution to avoid inadvertent exposure to broken concrete containers and/or electron tubes) is sufficiently protective. DTSC would require a dig restriction for Site RW-16 in any State Land Use Covenant for Parcel A-1. Also, the Air Force should have language within the FOST (and subsequent deed) that states that the Air Force will undertake the appropriate response or corrective actions necessary to address the potential radioactive waste disposed of on the property should concrete containers and/or electron tubes be discovered in the future.

   Air Force Response: The deed notification is required by the ROD, whose signatories include DTSC. The Air Force commitment to undertake the appropriate response or corrective actions necessary, as required by CERCLA section 120(h)(3)(ii)(II) is already described in Section 5.2.2 of the FOST. This text has been copied to Section 5.7 in response to this comment. See also the Air Force's response to EPA comment 11 above.

Attachment 8
FOST Concurrence Related Correspondence

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

FEB 2 3 2012

Mr. Philip H. Mook, Jr.
Senior Representative
AFRPA Western Region Execution Center
3411 Olson Street
McClellan CA 95652-1003

Re: Review of the Mather Air Force Base, Final Finding of Suitability to Transfer, Parcels A-1, P-1, and P-2

Dear Mr. Mook:

The U.S. Environmental Protection Agency (EPA) reviewed the *Mather Air Force Base, Final Finding of Suitability to Transfer (FOST), Parcels A-1, P-1, and P-2,* dated January 2012 and prepared by the Air Force Real Property Agency. Mather Air Force Base is a closed installation on the National Priorities List. EPA reviewed the Final FOST, the associated revisions, and the Final Supplemental Environmental Baseline Survey for Parcels A-1, P-1, and P-2, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Sections 120(h)(3) and 120(h)(4) and the sole purpose of this letter is to satisfy the requirements of these provisions.

The FOST identifies Parcels A-1, P-1, and P-2 as consisting of approximately 2,040 acres to be transferred by Deed via public benefit conveyance (Parcel A-1); approximately 6 acres will transferred by Deed via educational public benefit conveyance (Parcel P-1); and approximately 1.7 acres will transferred by Deed via educational public benefit conveyance (Parcel P-2), for a total of about 2,048 acres. The County plans to reuse and develop the Property for operation of an airfield, aviation support, light industrial, educational, and commercial use, in accordance with the *Draft Mather Airport Master Plan,* dated December 2003, and with the *Final Environmental Impact Study (EIS) for the Disposal and Reuse of Mather AFB,* dated April 1992. The deed for Parcels A-1, P-1, and P-2 will include restrictions for land use as described in Section 5 of the FOST and will contain a notice of hazardous substances stored, released, or disposed within the applicable transfer parcels pursuant to CERCLA 120(h)(3)(A)(i). The deed will also contain a covenant warranting that any corrective action found to be necessary after the date of transfer shall be conducted by the United States.

Attachment 8
FOST Concurrence Related Correspondence

The parcels include wetland habitats and Section 7 of the Endangered Species Act requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) on actions that may affect a federally listed species. The U.S. Air Force (Air Force) initiated Section 7 consultation for disposal of the Former Mather Air Force Base and the USFWS published a Biological Opinion (BO) on January 24, 2012. The BO includes requirements for protection of federally listed species at Mather AFB, including conservation easements and land use controls. Sacramento County is preparing a Wetlands Management Plan (WMP) to describe protection of wetlands and vernal pool habitat in accordance with the *Sixth Supplemental Record of Decision of the Final Environmental Impact Statement for the Disposal and Reuse of Mather AFB* (SROD), prepared by the Air Force and dated July 2010. Pursuant to the SROD, the WMP must be approved by appropriate federal and state agencies including but not limited to the EPA, USFWS, California Department of Fish and Game, and the U.S. Army Corps of Engineers. Section 5.16 of the FOST describes protection of biological resources. All deed notifications and restrictions required in the BO and the WMP will be incorporated into the deed and the property will not be transferred until EPA and the State of California have an opportunity to review and provide comments on the notifications and restrictions in the draft deed.

Without independent investigation or verification of certain information contained in these documents, the undersigned concurs with the Air Force's determination that the defined parcel is suitable for transfer by deed. The concurrence shall not be construed in any manner inconsistent with any obligation, right, or authority existing under the Mather Air Force Base Federal Facilities Agreement entered into by EPA, the State of California, and the Air Force. The undersigned expressly reserves all rights and authorities relating to information not contained in the documentation provided, whether such information is known as of this date, or discovered in the future.

If you have any questions about this letter please contact me at (415) 972-3438.

Sincerely,

Michael M. Montgomery, Assistant Director
Federal Facilities and Site Cleanup Branch

cc: Charlie Ridenour, DTSC
Duncan Austin, RWQCB

Attachment 8
FOST Concurrence Related Correspondence

California Regional Water Quality Control Board
Central Valley Region
Karl E. Longley, ScD, P.E.,Chair

11020 Sun Center Drive, #200, Rancho Cordova, California 95670-6114
(916) 464-3291 • FAX (916) 464-4645
http://www.waterboards.ca.gov/centralvalley

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

6 February 2012

Mr. Douglas Fortun
AFRPA Western Region Execution Center
3411 Olson Street
McClellan, CA 95652-1003

FINAL FINDING OF SUITABILITY TO TRANSFER AND FINAL SUPPLEMENTAL BASELINE SURVEY FOR PARCELS A-1, P-1, AND P-2, FORMER MATHER AIR FORCE BASE (AFB), SACRAMENTO COUNTY

California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) staff has reviewed the *Final Finding of Suitability to Transfer and Final Supplemental Baseline Survey for Parcels A-1, P-1, and P-2 at the former Mather Air Force Base* (Final FOST/SEBs). Central Valley Water Board staff comments on the draft document have been adequately addressed and we have no comments on the Final FOST/SEBs.

If you have any questions, please contact me at (916) 464-4733 or email me at mpierce@waterboards.ca.gov.

Marcus Pierce
Associate Engineering Geologist
Federal Facilities Unit

cc: Mr. John Lucey, United States Environmental Protection Agency, San Francisco
Mr. Franklin Mark, Department of Toxic Substances Control, Sacramento
Mr. Bill Hughes, ASE Inc.
Mr. Paul Bernheisel, AFCEE, McClellan

Attachment 8
FOST Concurrence Related Correspondence

Department of Toxic Substances Control

Matthew Rodriquez
Acting Secretary for
Environmental Protection

Deborah O. Raphael, Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Edmund G. Brown Jr.
Governor

February 28, 2012

Mr. Douglas V. Fortun
AFRPA Western Region Execution Center
3411 Olson Street
McClellan, California 95652-1003

FINAL FINDING OF SUITABILITY TO TRANSFER (FOST) AND SUPPLEMENTAL ENVIRONMENTAL BASELINE SURVEY (SEBS) FOR PARCEL A-1, P-1, AND P-2, FORMER MATHER AIR FORCE BASE, CALIFORNIA

Dear Mr. Fortun:

The Department of Toxic Substances Control (DTSC) has completed our review of the *"Final Finding of Suitability to Transfer, Parcels A-1, P-1, and P-2"* and *"Final Supplemental Environmental Baseline Survey, Parcels A-1, P-1 and P-2"* dated January 2012.

DTSC comments on the draft final FOST and SEBS have been adequately addressed. As previously stated in our comments on the draft final FOST, DTSC would require a digging restriction for Site RW-16 in any State Land Use Covenant for Parcel A-1. Thank you for the opportunity for reviewing this document.

If you have any questions, please contact me at (916) 255-3584 or e-mail at FMark@dtsc.ca.gov.

Sincerely,

Franklin Mark

Franklin Mark
Hazardous Substances Engineer
Sacramento Office
Brownfields and Environmental Restoration Program

cc: **Mr. John Lucey**
United States Environmental Protection Agency
Region IX
75 Hawthorne Street, Mail SFD-8-1
San Francisco, California 94105

Mr. Marcus Pierce
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, # 200
Rancho Cordova, California 95670-6114

Mr. William T. Hughes
ASE Inc.
c/o AFRPA / Western REC
3411 Olsen Street
McClellan, California 95652-1003

Attachment 9
FOST Related Notices and Correspondence

Former Mather Air Force Base

Public Comment on the Air Force's Intent to Sign Finding of Suitability to Transfer

The Air Force Real Property Agency intends to sign a Finding of Suitability to Transfer (FOST) document for Parcels A-1, P-1, and P-2 in the northwest portion of the former Mather Air Force Base. The Property will be transferred to Sacramento County in sections by deed through different mechanisms. Approximately 2,040 acres will be transferred by deed via public benefit conveyance (Parcel A-1); approximately 6 acres will transferred by deed via educational public benefit conveyance (Parcel P-1); and approximately 1.7 acres will transferred by deed via educational public benefit conveyance (Parcel P-2), for a total of about 2,048 acres. The County plans to reuse and develop the Property for operation of an airfield, aviation support, light industrial, educational, and commercial use .

The FOST is the Air Force's determination that the property is suitable for transfer and is based on an extensive review of the environmental condition of the property in consultation with federal and state environmental regulatory agencies.

The property is being conveyed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Section 120(h)(3). CERCLA remedial actions necessary to protect human health and the environment have been completed. The property became available for transfer as a result of the Base Closure and Realignment Act of 1988 and the subsequent closure of Mather.

The public is invited to review and submit comments on the draft FOST during the 30-day public comment period from 13 May 2011 to 11 June 2011.

A copy of the draft FOST and supporting documents are available for public review at the Mather Information Repository from 8 a.m. to 3 p.m. Monday – Friday at 3411 Olson Street, McClellan, CA 95652. For an appointment, call (916) 643-1250, ext. 201.

The documents may also be viewed online at https://afrpaar.lackland.af.mil/ar/docsearch.aspx. Select "Mather" as the base and search for document ID #3043

The Air Force will consider written comments received on or before 13 June 2011. Send comments or questions to the address below or via email at douglas.fortun@us.af.mil.

Mr. Douglas Fortun
Air Force Real Property Agency
3411 Olson St.
McClellan, CA 95652

For more information, contact Brian Sytsma, Community Relations, Air Force Real Property Agency, 3411 Olson St., McClellan, CA 95652; phone: (916) 643-1250, ext. 257.

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE