



DEPARTMENT OF THE AIR FORCE
AIR FORCE BASE CONVERSION AGENCY

AFBCA/DM
3411 Olson Dr., Room 105
McClellan, CA 95652-1071

December 21, 2001

TO: See Distribution

SUBJECT: Transmittal of the Draft Final Finding of Suitability to Transfer and Supplemental Environmental Baseline Survey for Parcel I-2, the Military Family Housing (MFH) Chapel, Mather AFB, CA

Thank you for your draft version review comments to aid us in developing these draft final documents. These documents reflect your comments and are provided for your review.

The scheduled review of this package is for the period of January 4, 2002 to February 1, 2002. You may e-mail your comments to twong@afbda1.hq.af.mil and bhovande@afbda1.hq.af.mil or fax them to 916-643-0460. If you have any questions, please call (916) 643-6420 ext 103.

ANTHONY C. WONG
BRAC Environmental Coordinator

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- D R A F T F I N A L -



Mather Air Force Base

Finding of Suitability to Transfer

Military Family Housing Chapel

Air Force Base Conversion Agency

**Finding Of Suitability To Transfer (FOST)
For Parcel I-2, Military Family Housing Chapel
Mather Air Force Base, California**

1. PURPOSE:

1.1 The purpose of this Finding of Suitability to Transfer (FOST) is to document environmentally-related findings and the suitability to transfer for the proposed deed of real property and any improvements at Mather Air Force Base (AFB), California, to Spectrum Christian Church. The property is described in Section 2 below. The property will be transferred by deed, and its anticipated use is for religious activity.

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

- (1) The Final Environmental Impact Statement (FEIS) for the Disposal and Reuse of Mather AFB dated April 1992;
- (2) The FEIS Record of Decision (ROD) dated March 1993;
- (3) The Supplemental Record of Decision for the Disposal and Reuse of Mather AFB dated September 1994;
- (4) The Revised Supplemental Record of Decision (RSROD) of the FEIS for the Disposal and Reuse of Mather AFB dated September 1995;
- (5) The Third Supplemental Record of Decision (TSROD) of the FEIS for the Disposal and Reuse of Mather AFB dated May 1998;
- (6) The Basewide Environmental Baseline Survey (EBS) dated December 1993;
- (7) The Supplemental EBS (SEBS) for Parcel I-2 dated March 17, 1994;
- (8) EG&G Idaho, Inc. asbestos report for Mather AFB dated September 15, 1990;
- (9) The Record of Decision for the Soils Operable Unit Sites and the Groundwater Operable Unit Plumes dated April 29, 1996;
- (10) The Basewide Groundwater Monitoring Report, Annual and 2nd Qtr. 2001, dated September 28, 2001;
- (11) Visual Site Inspections (VSI) conducted September 21, 1994 and December 13, 2001;
- (12) Air Force report titled "Lead-Based Paint Survey/Screen," dated April 11, 1995;
- (13) U.S. EPA approval letter of Operating Properly and Successfully (AC&W Remediation System) dated November 25, 1998;
- (14) Report of Proper and Successful Operation of the AC&W Remediation System by AFBCA dated September 25, 1998;
- (15) The Mather AFB Off-base Water Supply Contingency Plan dated February 1998.
- (16) Explanation of Significant Difference to the AC&W OU ROD, Discharge of Treated Groundwater to Mather Lake dated June 4, 1997.

2. PROPERTY DESCRIPTION

The property is shown on the map at Attachment 1 and is comprised of 15.6 acres. The property includes an 18,247 SF chapel (Facility 13000), a paved parking area, and well-maintained grounds.

Parcel I-2 consists of a portion of Parcel I that was leased due to underlying groundwater contamination. Parcel I-2 is comprised of the parcel identified in the EBS as I-1, 2. It is identified and defined in the FEIS ROD (see Section 1.2(2) above).

3. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE

The environmental impacts of this proposal have been adequately analyzed and disclosed in compliance with NEPA. These impacts are analyzed in the FEIS. Based on this analysis, the environmental impacts of proceeding with the transfer are not sufficiently adverse to human health and the environment to out-weigh the other advantages to the community and the public interest of this transfer and to prevent the transferring of this property.

4. ENVIRONMENTAL CONDITION OF THE PROPERTY

Based on a review of the VSIs and the Basewide EBS and SEBS of the parcel, the property is considered Department of Defense Environmental Condition Category (ECC) 4 due to an underlying TCE contaminated groundwater plume that affects the property. ECC 4 defines “areas where release, disposal, and/or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken.” This determination has been made in accordance with the provisions of CERCLA § 120(h)(3)(B), which provides that for the purpose of CERCLA § 120(h)(3)(A)(ii)(I), all remedial action has been taken if the construction and installation of an approved remedial design has been completed, and the remedy has been demonstrated to the designee of the EPA Administrator to be operating properly and successfully. This demonstration was approved in the U.S. EPA approval letter of Operating Properly and Successfully (AC&W Remediation System) dated November 25, 1998 (ref. Section 1.2 item 13).

The condition of the property has changed from the condition identified in the Basewide EBS. Investigation subsequent to the EBS found that a portion of the property had an underlying groundwater plume with TCE contamination above the EPA action level. However, the ECC has again changed with a successful remediation system in progress. *(EPA draft FOST comment 1)*

5. DEED RESTRICTIONS AND NOTIFICATIONS

The environmental documents listed in Section 1.2 were evaluated to identify environmental factors (Attachment 3) which may warrant constraints on certain activities in order to minimize substantially or eliminate any threat to human health or the environment. Such constraints typically are embodied as permanent restrictions in the deed or as specific notifications to the Transferee. The factors that require either deed restrictions or specific notifications are identified in Attachment 3 and are discussed below. Also, institutional controls are being developed that will be incorporated into the deed and remain effective throughout the cleanup process in the event of future property transfers (i.e., “run with the land”). (*CRWQCB and DTSC draft FOST Comment 1*). Please reference the EBS and SEBS for specific information on each resource category.

The Air Force has determined that the remaining factors listed in Attachment 3 pose no threat to human health or the environment and, therefore, require neither deed restrictions nor notifications to the Transferee.

5.1 Hazardous Substances Notification: CERCLA Section 120(h)(3)(A) and 40 CFR Part 373.2 require that United States property transferred by Deed shall contain notification in the Deed if hazardous substances in quantities exceeding 1,000 kilograms or the hazardous substance’s reportable quantity found at 40 CFR Part 302.4 (whichever is greater) were stored for one (1) year or more, or were known to have been released, treated, or disposed of on the property (see Atch 4). A hazardous substance storage notification need not be given because the underlying contaminated plume resulted from a release outside the boundaries of the property (see Section 5.2 for details about the plume and its remediation). (*EPA draft FOST comment 5*)

5.2 Installation Restoration Program (IRP):

IRP site WP-12, where storage or release of hazardous substances occurred (the source of an underlying TCE Plume), was located about 3,500 feet east northeast from this parcel. It is further discussed below.

The property will be transferred by deed, in accordance with the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 120(h)(3)(B), which provides that for the purpose of CERCLA § 120(h)(3)(A)(ii)(I), all removal or remedial action to protect human health and the environment has been taken if the construction and installation of an approved remedial design has been completed, and the remedy has been demonstrated to the designee of the EPA Administrator to be operating properly and successfully. This determination is supported by a U.S. EPA approval letter of Operating Properly and Successfully (OPS) (AC&W Remediation System) dated November 25, 1998 listed in section 1.2 (13) above. This documentation indicates that the U.S. EPA finds the remedial action is installed and operating properly and successfully.

Covenants will be included in the Deed to ensure that environmental investigations and remedial activities will not be disrupted at any time. Such covenants include, but are not limited to, prohibiting

activities that could disrupt any remediation activities or jeopardize the protectiveness of those remedies, such as:

- (1) Subsurface drilling or use of ground water unless the Air Force determines that there will be no adverse impacts on the cleanup process; or
- (2) Construction that would interfere with, negatively impact, or restrict access for cleanup work. The Deed will reserve a non-exclusive easement to allow continued access for the Air Force (or its designated contractor) and regulatory agencies to monitor the effectiveness of cleanup, perform five-year reviews, and/or take additional remedial or removal actions.

The edge of the Aircraft Control & Warning (AC&W) TCE plume, is under Parcel I-2 and is the reason that this parcel was initially leased. The AC&W Pump and Treat remedial cleanup system for this plume began operations in 1995. Initially, treated water was reinjected into the aquifer; however, injection well limitations prevented the system from operating at its design capacity. In 1997 the Air Force corrected this problem by discharging the treated water to Mather Lake ([consistent with the Waste Discharge Requirements Order No. 96-258 adopted 20 September 1996 which the Air Force does not consider a binding permit](#)) (*CRWQCB draft FOST comment 2*); this decision was documented in the “Explanation of Significant Difference to the AC&W OU ROD” (ref. 1.2 (16)). The U.S. EPA and the Air Force have evaluated the AC&W pump and treat system and determined that it is operating properly and successfully (OPS) in accordance with the provisions of CERCLA § 120(h)(3)(B) of CERCLA.

The AC&W ROD (USAF, 1993) did not identify institutional controls as necessary for protection of public health and the environment. Although there are drinking water supply wells in the down-gradient direction, their operation has not resulted in observed deflections in water levels in any groundwater monitoring wells having measurable contaminants. At the time of ROD signature, any future drilling plans prior to property transfer were subject to Air Force approval. The property overlying the AC&W groundwater TCE contaminant plume will be transferred prior to attainment of cleanup standards; therefore the following institutional controls are also necessary:

- (1) The transfer documentation shall protect the physical equipment that is part of the remedial action (i.e. wells, piping, wiring, utility vaults, pump controls, etc.).
- (2) The transfer documentation shall prohibit the drilling of additional wells that could interfere with the remedial action or create a threat to human health, and also prohibit the introduction of large quantities of water into the aquifer in any way that could interfere with the remedial action. Therefore no drilling or significant discharge would be allowed on the relevant portions of the transferred property without approval of the Air Force, U.S. EPA, and the State of California.
- (3) The transfer documentation will prohibit construction of any well or other structure to extract any water from the subsurface aquifer within the boundary of the Property for the purpose of human consumption unless such groundwater has been tested and found to meet all standards for human consumption, or such other use, and such owner or occupant shall first have obtained the prior written

approval of the Grantor, with concurrence from the U.S. Environmental Protection Agency and the State of California.

(4) The transfer documentation will prohibit drilling, digging, or excavation more than one hundred (100) feet below the soil surface except as expressly approved by the Grantor, in writing, until all remediation of the underlying contaminated groundwater plume is complete.

The risks associated with these sites have been evaluated; the Air Force has determined that this property can be used pursuant to the proposed transfer, with the specified use restrictions identified below, with acceptable risk to human health or the environment and without interfering with the environmental restoration program.

5.3 Asbestos Containing Material (ACM): A survey of Mather AFB facilities with asbestos-containing materials (ACM) was conducted in 1990. The results are within a comprehensive report prepared by EG&G Idaho, Inc. Facility 13000 was identified to have non-friable ACM primarily in the floor-covering tile. A trace amount of chrysotile was found in the wallboard. Friable insulation was found to be in the pipe insulation. The ACM was in good condition and not damaged or deteriorated to the extent that it created a potential source of airborne fibers. *(DTSC draft FOST Comment 2)* The details are presented in the Mather AFB Asbestos Survey Report maintained by the AFBCA/DM Mather Environmental Office.

Wastes containing at least 0.1 percent friable asbestos are regulated as hazardous wastes under Title 22, Division 4.5, Section 66261.24 of the 1996 California Code of Regulations. Wastes containing non-friable asbestos are considered to be non-hazardous (regardless of their asbestos content). Building insulation containing non-friable asbestos is not considered hazardous waste.

The Transferee was advised through the transfer documents of the presence, location, and condition of the ACM. The notice in the contract of sale provided that the Transferee will be responsible for remediating **any** damaged and disturbed friable ACM and complying with all applicable Federal, State, and local laws relating to asbestos. *(EPA draft FOST comment 6)*

5.4 Lead-Based Paint (LBP) Facilities other than Housing

LBP might be present in Facility 13000 since it was built prior to 1978. The Transferee will be notified through the SEBS of the possible presence of LBP in this facility. Notice will be provided to the Transferee that the Transferee will be responsible for managing all LBP and potential LBP in compliance with all applicable laws and regulations.

6. PUBLIC COMMENTS

On _____, 2001, public notice (with a thirty (30) day comment period) of the proposed transfer of the property to Spectrum Christian Church was provided by publication in one (1) local newspaper of general circulation (i.e., the Sacramento Bee, see Attachment 7 Public Notice). *[No written comments were received.]*

7. REGULATORY COORDINATION

California EPA and the U.S. EPA were notified of the initiation of the Draft FOST on June 7, 2001 and were invited to participate in preparing the working draft documents. Regulatory comments (Attachment 5) were received from California DTSC and the U.S. EPA in July 2001; their comments have been incorporated or addressed in the documents as indicated in Attachment 6, "Air Force Response to Regulatory Comments." A draft final FOST was provided for formal review and comment on December 20, 2001. Final comments were received from the California EPA and the U.S. EPA in letters dated _____.

8. UNRESOLVED REGULATORY COMMENTS

All comments provided by the regulators were addressed or have been incorporated in this document. *[There were no unresolved comments.]*

9. FINDING OF SUITABILITY TO TRANSFER

The deed proposal has been adequately assessed and evaluated for (a) environmental hazards, (b) environmental impacts anticipated from future use of the property, and (c) adequate notice of disclosure resources. All necessary remedial action has been taken, and any further remedial action found to be necessary will be conducted by the US including the reservation of access rights necessary for any future investigation. *(EPA draft FOST comment 10)*

The 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 deed covenants as addressed above. The property, therefore, is suitable for transfer.

Date

ALBERT F. LOWAS, JR.

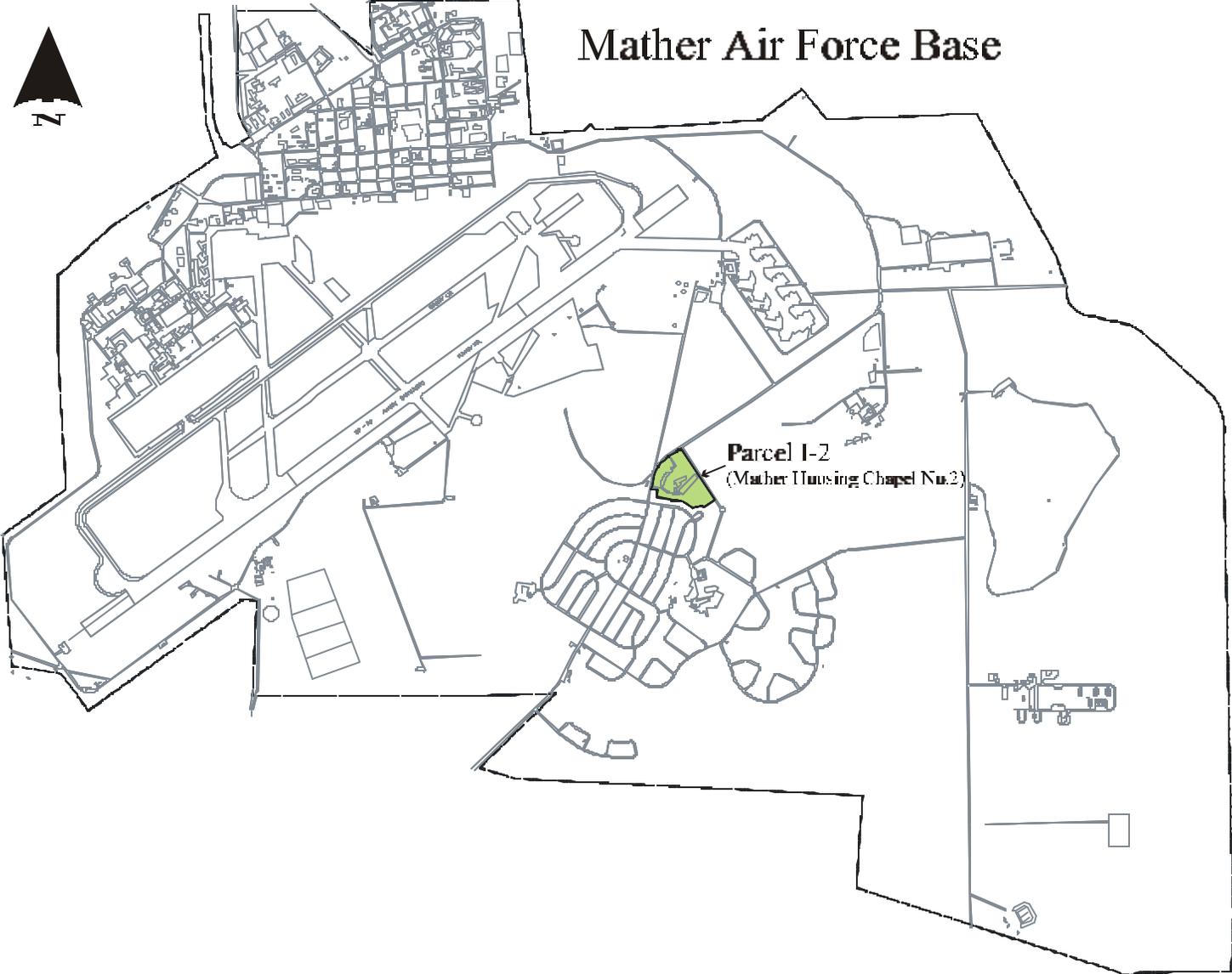
Director

Air Force Base Conversion Agency

7 Attachments:

1. Location Map
2. Property Map
3. Environmental Factors Considered
4. Notice of Hazardous Substance Release
5. Comments from Regulators
6. Air Force response to Regulator comments
7. Public Notice

**LOCATION MAP
PARCEL I-2 (MATHER HOUSING CHAPEL)**



**PROPERTY MAP
PARCEL I-2 (MATHER HOUSING CHAPEL)**



Transfer Restriction or Notification Required?		<i>Environmental Factors Considered</i>
No	Yes	
		<i>Environmental Restoration, Hazardous Substances, Petroleum</i>
X		Hazardous Substances (Notification)
	X	Installation Restoration Program (IRP) and Areas of Concern
X		Medical/Biohazardous Wastes
X		Oil/Water Separators (OWS)
X		Unexploded Ordnance
X		Petroleum Products and Derivatives
X		Radioactive & Mixed Wastes
X		Storage Tanks (UST/AST)
		<i>Disclosure Factors/Resources:</i>
	X	Asbestos
X		Drinking Water Quality
X		Indoor Air Quality
X		Lead-Based Paint (High-Priority Facilities)
	X	Lead-Based Paint (Other Facilities)
X		PCBs
X		Radon
		<i>Other Factors:</i>
X		Air Conformity/Air Permits
X		Energy (Utilities)
X		Flood plains
X		Hazardous Waste Management (By Lessee)
X		Historic Property (Archeological/Native American, Paleontological)
X		OSHA (Occupational Safety & Health Administration)
X		Outdoor Air Quality
X		Pesticides
X		Prime/Unique Farmlands:
X		Sanitary Sewer Systems (Wastewater)
X		Sensitive Habitat
X		Septic Tanks (Wastewater)
X		Solid Waste
X		Threatened and Endangered Species
X		Transportation
X		Wetlands

Table 2
NOTICE OF HAZARDOUS SUBSTANCES RELEASE

Notice is hereby given that the tables and information set out below (Hazardous Material/Substance Table) from the Base-Wide EBS and its Supplement and made a part of this instrument contain a notice of hazardous substances that have been stored for one year or more, or known to have been released, or disposed of, on certain portions of Mather AFB adjacent Parcel I-2, and the dates that such storage, release, or disposal took place. This notice is required under 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).

Substance	Regulatory Synonym(s)	CAS Registry Number	Quantity kg/pounds	Date	Hazardous Waste ID Number (if applicable)	Response	Remarks
TCE	Trichloro-ethylene	79-01-6	Unknown	Unk.	79-01-6	Yes	See Basewide Monitoring Report, Annual and Fourth Quarter 2000, Mather AFB, dated August 2001

Comments from Regulators

To: Brian Hovander@MCCLELLAN@AFBDA.DCM
From: Tony Wong@MCCLELLAN@AFBDA.DCM
Originated by: "Karen Bessette" <BessetK@rb5s.swrcb.ca.gov>
Cc:
Subject: fwd: Draft FOST and SEBS for Parcel I-2-- MFH Chapel
Attachment: BEYOND.RTF
Date: 7/27/01 2:12 PM

FYI

From: "Karen Bessette" <BessetK@rb5s.swrcb.ca.gov>, on 7/27/01 1:48 PM:
To: Tony Wong@MCCLELLAN@AFBDA.DCM
Cc:
ISMTP@ADMIN@AFBDA.HDQ[<Ttrearse@DTSC.ca.gov>],ISMTP@ADMIN@AFBDA.HDQ[<Lowe.debbie@epa.gov>],ISMTP@ADMIN@AFBDA.HDQ["John Russell"
<RusselJ.RB5SPost.Region5S@rb5s.swrcb.ca.gov>],ISMTP@ADMIN@AFBDA.HDQ[<Bill_Hughes@wp
i.org>]

Tony,

We have reviewed the Draft Finding of Suitability to Transfer and Supplemental Environmental Baseline Survey for Parcel I-2, the Military Family Housing (MFH) Chapel, Mather AFB, CA. Please accept this e-mail as our formal comments. A copy of the message will be placed in the Mather case file. I apologize for being outside the time requested for comments, but I was on vacation when the review period ended 11 July 2001. Please consider our comments below when preparing the final version of the subject documents.

Parcel I-2 is proposed for transfer by deed to the Spectrum Christian Center, and its anticipated use is for religious reasons. The area consists of approximately 15.6 acres of improved land with one chapel and associated parking located in the family housing area. The subject documents acknowledge that the parcel overlies the leading edge of the Aircraft Control and Warning Site Plume undergoing remediation.

We consider the deed restrictions and institutional controls presented in Section 5.2 of the FOST to be an important part of this transfer to adequately protect the integrity of the overall groundwater remedy and components of the groundwater treatment system, as well as prevent human consumption of contaminated groundwater. The FOST should include a specific reference to the covenants and transfer documentation that will include the institutional controls described in this section. We support developing an ESD to the AC & W ROD or other primary document to ensure that the institutional controls are properly implemented, enforceable, and remain effective throughout the cleanup process in the event of future property transfers (i.e. "run with the land"). We also suggest the SEBS acknowledge that the operation and maintenance of the groundwater treatment system and discharge of treated groundwater to Mather Lake is regulated pursuant to Waste Discharge Requirements Order No. 96-258 adopted 20 September 1996.

The information presented in Section 5.2 of the SEBS describing Site 28 and Site 34 is out-of-date. The Air Force conducted a post-ROD soil boring investigation at Site 28 in accordance with the 2000 Final Work Plan for UST Sites at Mather. Site 28 closure is pending completion, and our approval, of the Final Closure Report (Draft Report dated December 2000). Remediation was completed at Site 34 after 19 months of bioventing to address petroleum contamination. We issued a determination of closure for Site 34, letter dated 20 November 2000. Our 7 December 2000 letter further approved destruction of the remaining remediation wells at Site 34.

We believe it is appropriate for the SEBS to identify these sites and describe their IRP history, including current site conditions. The site summary information in the SEBS should be up-dated. However, the SEBS text that indicates these two IRP sites impact the parcel should be revised based on the current status of each site. No reference to these sites is included in the FOST. This may be appropriate since closure is pending at Site 28

and already completed at Site 34.

Thanks for your attention to these comments. Please contact me with any questions.

Karen Bessette
(916) 255-3065
bessetk@rb5s.swrcb.ca.gov



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

July 12, 2001

Anthony Wong
BRAC Environmental Coordinator
Air Force Base Conversion Agency
AFBCA/DM
3411 Olson Street, # 105
McClellan, CA 95652

Dear Mr. Wong,

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Finding of Suitability to Transfer (FOST) and Supplemental Environmental Baseline Survey (EBS) for Parcel I-2, the Military Family Housing (MFH) Chapel, Mather AFB, California. The following comments are provided:

EBS comments

Section 3.3

If the last VSI was conducted in 1994, an update should be undertaken.

Section 4.2.1

Why refer to chlorine storage at an adjacent parcel which took place prior to 1993?

Section 4.2.3

This is the only reference to 2 IRP sites impacting the parcel. The rest of the documents refer only to the plume. The document either needs to explain the impacts or eliminate/clarify the reference.

Section 4.2.6

The statement regarding the Air Force belief that there are no elevated pesticide residuals is suspect, but more important is the reference to mixing areas. Are the storage and mixing areas included within this parcel? If not, the document should make that clear. If they are, what investigation has been conducted at those areas? Are the storage and mixing areas near the parcel? Also, how far away from the Morrison Creek fish kill area is the parcel?

Section 4.2.11

Language regarding maintenance "recommendations" is inconsistent with language in FOST referring to

notice and requirement to comply with regulations. During the time the Chapel has been leased, has any investigation/remediation of LBP been undertaken by the lessee? Are there child occupied facilities within the Chapel e.g. nursery/day-care center?

FOST comments

Page 2 Last paragraph

This paragraph need to be clarified. The text suggests that this area was part of a larger parcel which was described as ECC 2 under the old system (Storage of HS but no release) before the extent of GW contamination was known. The subsequent identification as ECC-1 is clearly inconsistent with the GW plume. Did the regulators concur with that determination?

Section 4 and 5

Note that at several points(e.g. p 2, p 3) the FOST refers to 120(h)(A)(i)(l) where the correct citation is 120(h)(3)(A)(i)(l).

Section 5

The use of the term Deed Restriction should provide the basis for modifying later more specific discussions of the restrictions. Those restrictions, outlined on pages 4-5, should be embodied in the deed to assure that they run with the land and are enforceable by the Air Force.

EPA believes that an ESD would be the appropriate mechanism to document the measures to be used to maintain the protectiveness of the selected remedy after transfer of the property. It is EPA's understanding that the Air Force has committed to writing an ESD for the AC&W ROD, therefore, the ESD does not need to be produced prior to the transfer of this parcel.

Section 5.1

The FOST must reference the HS Notice required by 120(h)(3) which must include not only a description of the release (see attachment 4) but also a description of the remedial action taken.

Section 5.3

The third paragraph is inconsistent with the first which asserts that there is no damaged ACM present. Which is the correct description of the state of the property and the obligation of the transferee?

Section 5.4

Since there has been no sampling for LBP, there must be a restriction on child occupancy uses unless the Transferee can demonstrate that LBP has been investigated/addressed based on standards established pursuant to Title X even though this is not "target housing".

Section 5.5

The FOST states that "The Sacramento Municipal Utilities District (SMUD) owns 86 transformers in base housing that were formerly owned by PG&E". The FOST did not mention any housing on this parcel. Please clarify.

Section 5.6

The FOST states that "The level of Radon gas in one residence not in Parcel D2 was found to be above the EPA recommended level of four picouries per liter. There has been no follow-on sampling to determine it is still above the U.S.EPA action limit." This situation needs to be clarified before the final FOST.

Section 9

In addition to the statements on page 7, the FOST also needs to include a reference to the 120(h)(3) covenants to certify that: a)all necessary remedial action has been taken, and b)any further remedial action found to be necessary will be conducted by the US as well as the reservation of access rights which should include any future investigation.

Attachment 3

Please add pesticides to the list of Environmental Factors Considered.

Please feel free to contact me with any questions regarding these comments at lowe.debbie@epa.gov or (415) 744-2206.

Sincerely,

Debbie Lowe
Remedial Project Manger

cc: Tami Trease, DTSC
Karen Bessette, RWQCB

DRAFT

Mr. Tony Wong
Department of the Air Force
3411 Olson Drive
Room 105
McClellan AFB, CA 95652-1071

DRAFT SUPPLEMENTAL ENVIRONMENTAL BASELINE SURVEY (SEBS) and DRAFT FINDING OF SUITABILITY TO TRANSFER, PARCEL I-2, MILITARY FAMILY HOUSING CHAPEL, MATHER AIR FORCE BASE

Dear Mr. Wong:

We have reviewed the above-referenced documents and have the following comments to provide:

SSEBS:

- 1) Section 4.2.3, Installation Restoration Program (IRP). Please state specifically which two IRP sites impacted Parcel I-2, as referenced in the first sentence.
- 2) Sections 5.2.2 and 5.2.3. Please describe the current ECC assigned to IRP Sites 28 and 34.

FOST:

- 1) Section 5.2, Installation Restoration Program (IRP). DTSC agrees with the Air Force's position regarding the necessity for institutional controls. If any hazardous materials, substances, wastes or constituents remain on the property at levels prohibiting unrestricted use, a land use covenant, pursuant to Civil Code Section 1471, must be signed between the Air Force and the State. We are willing to meet with the Air Force to discuss this matter further and assist in the development of the covenant language.
- 2) Section 5.3, Asbestos Containing Material. The FOST states that ACM at Facility 13000, Parcel I-2, is in good condition and not friable. However, the SEBS states the "Air Force intends to have the existing damaged or deteriorated friable asbestos remediated by the recipient of Parcel I-2." Please correct this discrepancy concerning the condition of ACM at Facility 13000.

If you have any questions concerning this letter, please contact me at (916) 255-3603.

Sincerely,

Francesca D'Onofrio
HSS

**Air Force Response to
Regulator Comments**

Response to Comments: **California Regional Water Quality Control Board** (July 27, 2001): Draft Supplemental Finding of Suitability to Transfer (FOST) for the Mather Military Family Housing Chapel.

SEBS Comment 1: Section 4.2.2 has now indicates that only IRP Site WP-12 impacts Parcel I-2.

SEBS Comment 2: Sections 5.2.1 and 5.2.2 have been deleted as the information was not relevant to Parcel I-2.

FOST Comment 1: The Air Force will work with the regulatory agencies to develop institutional controls applicable to Section 5.2 of this FOST for Parcel I-2.

FOST Comment 2: Comment about waste discharge requirements is addressed within FOST Section 5.2. The Air Force does not agree that discharge to Mather Lake is subject to binding regulation by CRWQCB.



Response to Comments: **Environmental Protection Agency** (July 12, 2001): Draft Finding of Suitability to Transfer and Draft Supplemental Environmental Baseline Survey for the MFH Chapel, Mather AFB, June 7, 2001.

SEBS Comment 1: The date of the VSI in Section 3.3 has been updated.

SEBS Comment 2: Section 4.2.1 on chlorine storage has been deleted.

SEBS Comment 3: Section 4.2.2 (formerly 4.2.3) has been amended to indicate that only the plume impacts Parcel I-2.

SEBS Comment 4: Section 4.2.6 (formerly 4.2.5) has been amended to indicate that no pesticides or herbicides were stored or mixed on Parcel I-2. Reference to a fish kill that allegedly occurred 36 years ago somewhere on Mather AFB has been deleted.

SEBS Comment 5: Section 4.2.10 (formerly 4.2.11) has been changed to incorporate the comment.

FOST Comment 1: Section 4 has been changed to reflect an Environmental Category Code 4 for the property due to the underlying plume.

FOST Comment 2: Typographical error noted in the comment has been corrected.

FOST Comment 3: Restrictions indicated in Section 5.2 will be incorporated within the Deed.

FOST Comment 4: As indicated, the Air Force is planning to write an amendment to the ROD to require institutional controls for landing overlying the AC&W Plume.

FOST Comment 5: Section 5.1 has been amended to reference CERCLA Section 120(h)(3)(A) and address the remedial action taken.

FOST Comment 6: The third paragraph of Section 5.3 has been amended to be consistent with the first paragraph.

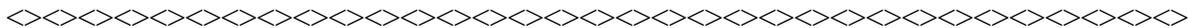
FOST Comment 7: The Deed will only recommend that the grantee comply with all applicable laws and regulations pertaining to LBP. The Air Force does not consider the Chapel to be subject to the same level of lead-based paint restrictions as housing under TSCA. The comment requesting that *“a restriction on child occupancy uses unless the Transferee can demonstrate that LBP has been investigated/addressed based on standards established pursuant to Title X even though this is not ‘target housing’”* is unsubstantiated and therefore unincorporated.

FOST Comment 8: Section 5.5 now indicates the electrical transformers are within adjacent Parcel D.

FOST Comment 9: Section 5.6 has been deleted because the radon detection was not in this parcel; it was in a facility in adjacent Parcel D that has been demolished.

FOST Comment 10: Comment has been incorporated into Section 9.

FOST Comment 11: Comment has been incorporated into Attachment 3.



Response to Comments: **CAL-DTSC** (E-mail dated August 14, 2001): Draft FOST and SEBS for Parcel I-2 – MFH Chapel.

SEBS Comment 1: Section 4.2.2 (formerly 4.2.3) has now indicates that only IRP Site WP-12 impacts Parcel I-2.

SEBS Comment 2: Sections 5.2.1 and 5.2.2 have been deleted, as the information was not relevant to Parcel I-2. Therefore the comment is no longer relevant.

FOST Comment 1: Comment noted.

FOST Comment 2: Section 5.3 will be corrected to match the information in SEBS Section 4.2.9.

**Supplemental Environmental Baseline Survey
For Parcel I-2, Military Family Housing Chapel
Mather Air Force Base, California**

1. EXECUTIVE SUMMARY

This supplement to the Environmental Baseline Survey (SEBS) has been prepared to document the environmental condition for Parcel I-2, the former military family housing (MFH) Chapel. It updates the Basewide Environmental Baseline Survey (EBS) prepared in December 1993, as required by Department of Defense (DoD) policy before any property can be sold, leased, transferred, or acquired.

Parcel I-2 consists of an area that was formerly leased because of being impacted by a trichloroethylene (TCE) groundwater plume emanating from a nearby CERCLA site currently undergoing remediation. Now that the existing groundwater remediation system has been determined to be operating properly and successfully, this Chapel is to be transferred to Spectrum Christian Center.

This survey is based on a review of the EBS, the initial Parcel I-2 SEBS dated 22 September 1994, and visual inspections of the property conducted by the Air Force in September 1994 and December 2001. This SEBS also includes an assessment of the adjacent properties contiguous to or relatively near Parcel I-2 that could pose environmental concern and/or affect Parcel I-2.

Groundwater sampling indicated that contamination from a nearby Installation Restoration Program (IRP) site had migrated under Parcel I-2 (EBS Parcel D-3,7). A Remedial Action was initiated and became operational in 1995; it was demonstrated to be operating properly and successfully in 1998. Parcel I-2 is classified as DoD Environmental Condition Category (ECC) 4 property. ECC 4 refers to “areas where release of hazardous substances has occurred, and all remedial actions necessary to protect human health and the environment have been taken.”

2. INTRODUCTION

2.1 Purpose of Survey: This SEBS has been prepared to document the environmental condition of Parcel I-2. This supplement establishes a baseline for use by the Air Force in making decisions concerning real property transactions.

2.2 Boundaries of Parcel and Scope of Survey: The area encompassing Parcel I-2 (i.e., EBS parcel I-1,2) is ECC 4. It consists of approximately 15.6 acres of improved land with one chapel (Facility 13000) and associated parking. A base map (see Attachment 1) and a parcel map (see Attachment 2) indicate the location of Parcel I-2. Another map (see Attachment 3) includes property within approximately 0.25 miles of the Parcel I-2 boundary that was inspected to identify areas of potential environmental concern.

2.3 Site History and Current Use:

Construction of Mather AFB began in March 1918 to provide a facility for a military flight training school. The base was closed from 1922 to 1930 and from 1932 to 1941. In 1941 the base reopened to support a school for pilot and navigator training. Prior to base closure in 1993, the host unit at Mather AFB was the 323rd Flying Training Wing (FTW). The mission of the 323rd FTW was to provide training in navigation for the United States Air Force, other DoD services, and Allied nations. In 1958, the 320th Bombardment Wing of the former Strategic Air Command (SAC) was assigned to Mather AFB. The SAC Wing operated and maintained B-52 and KC-135 aircraft until its deactivation in 1989. Mather AFB was among the military installations that were selected for closure by the DoD in accordance with the Base Closure and Realignment Act of 1988. Mather AFB closed on September 30, 1993.

The land within Parcel I-2 was used to provide religious services during the former operation of Mather AFB.

3. SURVEY METHODOLOGY

3.1 List and Description of Documents Reviewed:

- (1) The Final Environmental Impact Statement (FEIS) for the Disposal and Reuse of Mather AFB dated April 1992;
- (2) The FEIS Record of Decision (ROD) dated March 1993;
- (3) The Supplemental Record of Decision for the Disposal and Reuse of Mather AFB dated September 1994;
- (4) The Revised Supplemental Record of Decision (RSROD) of the FEIS for the Disposal and Reuse of Mather AFB dated September 1995;
- (5) The Third Supplemental Record of Decision (TSROD) of the FEIS for the Disposal and Reuse of Mather AFB dated May 1998;
- (6) The Basewide Environmental Baseline Survey (EBS) dated December 1993;
- (7) The Supplemental EBS (SEBS) for Parcel I-2 dated May 1997;
- (8) EG&G Idaho, Inc. asbestos report for Mather AFB dated September 15, 1990;
- (9) The Record of Decision for the Soils Operable Unit Sites and the Groundwater Operable Unit Plumes dated April 29, 1996;
- (10) The **Basewide** Groundwater Monitoring Report, Annual and 2nd Qtr. 2001, dated September 28, 2001;
- (11) Visual Site Inspections (VSI) conducted September 21, 1994 and December 13, 2001;
- (12) Air Force report titled "Lead-Based Paint Survey/Screen," dated April 11, 1995;
- (13) U.S. EPA approval letter of Operating Properly and Successfully (AC&W Remediation System) dated November 25, 1998;
- (14) Report of Proper and Successful Operation of the AC&W Remediation System by AFBCA dated September 25, 1998;

(15) The Mather AFB Off-base Water Supply Contingency Plan dated February 1998.

(16) Explanation of Significant Difference to the AC&W OU ROD, Discharge of Treated Groundwater to Mather Lake dated June 4, 1997.

3.2 Personnel Interviewed:

- a. Randy Dennis, Engineering Technician, AFBCA/DD-McClellan.
- b. Bill Hughes, Geologist, WPI Contractor/IRP, Mather, CA.
- c. Paul Bernheisel, Environmental Engineer, AFCEE/ERB, McClellan, CA.

3.3 Inspections of Properties Conducted (VSI & PSI):

A visual site inspection (VSI) and a physical site inspection (PSI) of Parcel I-2 was conducted by the Air Force on December 13, 2001. (*EPA draft SEBS Comment 1*) The purpose of this inspection was to identify any stained soils, stressed vegetation, leachate seepage, unusual odors, friable asbestos, peeling lead-based paint, etc. that might indicate environmental concerns. None of these conditions were noted around the buildings.

4. FINDINGS

4.1 Environmental Setting:

Mather AFB is located in Sacramento County in central California. The base is in the lower Sacramento Valley between the Coast Range and foothills of the Sierra Nevada Range. Mather AFB occupied 5,716 acres at the time of Base closure. Mather AFB is adjacent to the community of Rancho Cordova, approximately 80 miles northeast of San Francisco, and 10 miles east of Sacramento. The topography of the main base and airfield is generally level. The family housing and outlying areas have gently rolling contours.

The climate in the Sacramento Valley portion of Central California is comparable to Mediterranean or subtropical climates that are characterized by hot dry summers and cool moist winters. Annual rainfall typically averages 18.8 inches and occurs primarily during the winter months (i.e., October through May).

The following environmental factors or resources were evaluated during the preparation of this SEBS. Factors or resources previously researched, identified, and included in the EBS were considered adequately addressed. They were not re-evaluated because no significant changes in the condition of the property have occurred since the EBS was prepared.

4.1.1 Site Hydrology: Natural drainage patterns have been altered by construction of the airfield and numerous base facilities and structures. In general, surface flow at Mather AFB (including

Parcel I-2) is to the southwest, parallel to Morrison Creek drainage, ultimately discharging in the Sacramento River. Seasonal ponding occurs in some areas of the base during the winter months. The direction of regional groundwater flow is from the east-northeast to west-southwest.

4.1.2 Utilities: Parcel I-2 is served by telephone, electricity, potable water, natural gas, and sanitary sewer utilities.

4.1.3 Potable Water: Mather AFB has derived its potable water from ten wells located in the Main Base and MFH areas. Total potable water production capacity on Mather AFB has been 19.3 million gallons per day. Water has been provided to Parcel I-2 from the MFH area water distribution system; this system includes five water wells with a total production capacity of 11.8 million gallons per day. Sacramento County has taken over responsibility for the entire Water System on the former Mather AFB.

MFH Well No. 3 is not being used at this time. Use of this well could jeopardize the current action to remediate the nearby AC&W TCE plume. To date the MFH wells have been able to meet the water quality standards of the California Department of Health Services.

The Mather potable water supply system, including production wells and points throughout the distribution system, are tested on a frequency set forth by the State of California Department of Health Services, California Safe Drinking Water Act, and related laws. The Mather water production wells are tested for regulated organic chemicals on a regular basis. Other regulated and unregulated chemicals are analyzed as directed by regulating agencies and applicable laws. User end points throughout the distribution system are routinely analyzed for bacterial contamination. At present there have been no reported instances of established maximum concentration levels for regulated or unregulated chemicals being exceeded. In addition there have been no positive results for fecal coliform or E. coli.

The Air Force agreed to and has provided up to 900 gpm of water to a regional water purveyor west of the base on an emergency basis because of a contaminated groundwater plume emanating from the main base area of Mather AFB; an off-base water supply contingency plan (ref. section 3.1 (17)) addresses this agreement. The plume has affected major off-base wells serving the adjacent community. This has placed a potential increased capacity demand on the Main Base water distribution system.

In 1997 two of the four Main Base wells (No. 1 and 2) were shut down due to detections of perchlorate. The perchlorate contamination originated from an off-site source to the east of Mather AFB. The perchlorate is believed to be the disassociated ion of the rocket fuel oxidizer ammonium perchlorate that has been used nearby at rocket engine development facilities. Because the Main Base and the MFH water distribution systems are interconnected, it became necessary to use the MFH system to support the demand on the Main Base system. An interim alteration allowed for an interconnecting line between the MFH and the main base systems that provides approximately 1060 gpm to the main base area; later a larger 16" main was constructed to convey water to the Main Base.

- D R A F T F I N A L -

Sacramento County is using the MFH water distribution system to support water demand off base at the Sunrise-Douglas area now that they have taken over operation of the Mather water distribution system. This has further increased the demand on the MFH system.

The following is a summary of the housing area wells:

<u>MFH Well No.*</u>	<u>Facility Number</u>	<u>Emergency Generator</u>	<u>Storage Capacity</u>	<u>Capacity (gpm)</u>	<u>Mather Location**</u>
1	14517	150 HP	5,000	1350	@ Youth Center
3	14992	none	5,000	1350	105 Harding Ave.
4	14991	215 HP	5,000	2200	228 Cochran Dr.
5	17760	150 KWH	5,000	1500	202 McRoberts Way
6	16200	none	500,000	1900	102 Hadden Way

*Note - there is no MFH Well No. 2

**Note - these are the original street names

4.1.4 Wastewater: Parcel I-2 is served by the sanitary sewer system. County interceptor lines currently convey Mather AFB sanitary sewer system wastewater to the Sacramento Regional Wastewater Treatment Plant that is located near the city of Freeport. Prior to 1983, wastewater was treated in the former Mather AFB sewage treatment plant and discharged to Morrison Creek. The former Mather AFB sewage treatment plant (not within Parcel I-2) is identified as IRP Site 20 and has been remediated as part of OU 3 (see section 4.2.2.2 below).

4.1.5 Solid Waste: Prior to 1974, solid waste from Mather AFB was disposed of in on-base landfills. From 1974 until base closure, solid waste was disposed of in the Kiefer and Lien & Donant (L&D) landfills. The Kiefer Landfill is a Class III county operated facility, suitable for the disposal of non-hazardous and general municipal waste; it does not accept liquids or toxic wastes. L&D Landfill is privately owned and operated and accepts general municipal wastes. The base utilized contractors to haul wastes off site.

4.1.6 Energy:

4.1.6.1 Electricity: Sacramento Municipal Utility District (SMUD) supplies electricity to Mather AFB including Parcel I-2.

4.1.6.2 Natural Gas: Pacific Gas & Electric provided natural gas to Mather AFB including Parcel I-2. Facilities on the southeastern side of the runway are serviced with propane due to the expense of installing natural gas piping to these remote areas of the base.

4.2 Hazardous Substances and Petroleum Products:

4.2.1 Hazardous Waste Management: The only hazardous waste that may have been generated in Parcel I-2 would have been household hazardous waste which does not contribute to this categorization factor.

4.2.2 Installation Restoration Program (IRP): One of the 89 Installation Restoration Program (IRP) sites is 3,500' east-northeast of Parcel I-2 (*EPA draft SEBS comment 3*) (i.e., IRP site WP-12 (*DTSC draft SEBS comment 1*)). The location of this site is shown at Attachment 3. IRP site WP-12, the TCE contaminated groundwater plume, underlies the northwestern portion of Parcel I-2 (see Section 5.2). Table 1 provides IRP descriptions, current status, and site locations of all the Mather IRP sites. In 1979 TCE contaminated groundwater was found in the potable water well serving the nearby Aircraft Control and Warning (AC&W) site. Subsequently, the AC&W site was listed on the National Priorities List (NPL) on July 22, 1987. The NPL listing was expanded to include the whole base in November 1989. Consequently, Mather AFB is subject to the special provisions for Federal Facility NPL sites under CERCLA Section 120. The Mather AFB IRP is managed under a Federal Facility Agreement (FFA), dated July 21, 1989, with EPA Region IX, and the State of California, represented by the Department of Toxic Substances Control (DTSC). Documents relating to IRP findings and conclusions are found in the Administrative Record File located at the AFBCA/DD McClellan Environmental Office, 3411 Olson St, Room 105, McClellan, CA 95652-1071.

4.2.2.1 IRP Sites on Mather AFB: There are 89 IRP Sites on Mather AFB as shown on the map at Attachment 1. These IRP Sites are listed in Table 1 (see Attachment 4) and described in detail in Section 3 of both the Final EIS and the EBS.

4.2.2.2 Operable Units (OU) at Mather AFB: Contamination associated with Mather AFB has been grouped into six separate units called operable units (OU). They are described as follows:

OU 1, is known as the AC&W OU and is associated with IRP Site WP-12. It includes the volatile organic compound (VOC) plume of TCE known to underlie the AC&W Site and the northwest portion of the housing area. The depth to groundwater at the AC&W Site is approximately 120'. The ROD for OU 1 was signed in December 1993, and remediation is in progress. Remediation consists of pumping and treatment utilizing air stripping. The treated water is being discharged into Mather Lake. Parcel I-2 was leased rather than transferred because of the underlying contamination. However, now that the remediation system has been determined to be operating properly and successfully, it is to be transferred. A more detailed description of this OU is found in Section 5.2.3.

OU 2, is known as the Groundwater OU. It includes the groundwater plume of TCE known to underlie much of the Industrial and Cantonment parts of the base, the West Ditch area (both on and off the base) and the southwesterly corner of the base (both on and off the base). These plumes consist of primarily TCE and Perchloroethylene (PCE). The ROD for OU 2 was signed in June 1996. Remedial action is in progress. There is no impact to Parcel I-2.

OU 3, is known as the Soil OU. It does not impact Parcel I-2. The ROD for OU 3 was signed in June 1996 in conjunction with the ROD for the Groundwater OU. Remedial action is in progress. There is no impact to Parcel I-2.

OU 4, also known as the Landfill OU, consists of six IRP landfill sites (sites LF-01 through LF-06). It does not impact Parcel I-2. The ROD for OU 4 was signed in August 1995. Based upon the ROD, landfill site LF-01 received no further action. The other five landfill sites were to be either capped or removed/consolidated with LF-04. LF-02, LF-05, and LF-06 were excavated and consolidated with LF-04. Also, the top two feet of contaminated surface soil at IRP site 69 (the former ordinance burning and detonation area) was removed and consolidated with LF-04. LF-03 and LF-04 were capped with neoprene liners and covered with soil to preclude rainwater from passing through them and contaminating the underlying groundwater. All necessary work for this OU was completed between the summer of 1996 and the spring of 1997.

OU 5, also known as the Basewide OU, accomplished most of the necessary remediation that was not accomplished within the first four OU's. This OU does not impact Parcel I-2. The Basewide OU Record of Decision was signed in August 1998 and remedial action is in progress.

OU 6, also known as the Supplemental Basewide OU, will accomplish the necessary remediation that was not accomplished within the first five OU's. This OU does not impact Parcel I-2. The Supplemental Basewide OU Record of Decision is in preparation.

The contaminated groundwater plume under Parcel I-2 will have no effect on human health or the environment for workers or future residents. There is no direct pathway to expose the workers or residents to this groundwater, and there will be restrictions within the Deed against drilling wells in Parcel I-2.

4.2.3 Storage Tanks: There are no aboveground or underground storage tanks that have been utilized in Parcel I-2.

4.2.4 Oil/Water Separators: There are no oil/water separators in Parcel I-2.

4.2.5 Pesticide Usage: Pesticide applications occurring on, or adjacent to Parcel I-2 were made in accordance with manufacture label specifications. EBS Tables C-1 & C-2 provide an inventory of formerly stored pesticides.

Pesticides and herbicides were applied for landscaping practices and structural and public health concerns in accordance with manufacturer's guidelines; no releases are known to have occurred on Parcel I-2. Because pesticides and herbicides were applied in accordance with manufacturer's guidelines, the Air Force does not believe that there are residual levels of pesticides and herbicides. Pesticides and herbicides were not stored or mixed on this Parcel (see EBS Table 5-1). They were mixed at the former base entomology shop or the golf course. *(EPA draft SEBS Comment 4)*

4.2.6 Polychlorinated Biphenyls (PCBs): There are no known PCBs (including spills or leaks) at or near Parcel I-2. PCBs are hazardous oils that are regulated by the Toxic Substance Control Act (TSCA) and other Federal and State laws. By Air Force policy their use was to be eliminated at all Air Force installations. The last PCB (i.e. containing greater than 50 ppm PCB in the

oil) transformers and capacitors were removed from Mather AFB in August 1991. In June 1991, 73 PCB contaminated transformers were retrofilled by contract. 'PCB contaminated' transformers are defined by Federal Laws as containing 50-500 ppm PCBs and by California Waste Disposal Regulations as greater than 5 ppm PCB. All PCB contaminated transformers on Mather AFB were flushed and filled with non-PCB oil. There were 15 transformers remaining above 5 ppm when tested in December 1991. These were flushed and filled again with non-PCB oil in March 1992, and they tested below 5 ppm in July 1992. The Air Force owns no known PCB transformers on Mather AFB (see EBS Section 3.4.2).

4.2.7 Radon: A detailed radon assessment was conducted in 1990 with 1755 radon monitors being placed in residences, schools, day care facilities, and hospital wards on the base. Two of the samples in the MFH area were shown to approach the EPA action limit of 4.0 picocuries per liter (pCi/l); however, only one sample (a single-family residential unit formerly located at 103 Woodring Way, not in Parcel I-2) exceeded the EPA action limit with a reading of 4.6 pCi/l. There has been no follow-on sampling to determine if it is still above the EPA action limit. Also, all of the housing units in this area have been demolished and are being replaced.

4.2.8 Ordnance: There is no unexploded ordnance in Parcel I-2.

4.2.9 Asbestos: Wastes containing at least 0.1 percent friable asbestos are regulated as hazardous wastes under Title 22, Division 4.5, Section 66261.24 of the California Code of Regulations. Wastes containing non-friable asbestos are considered to be non-hazardous (regardless of their asbestos content). Building insulation containing non-friable asbestos is not considered hazardous waste. A survey of Mather AFB facilities with asbestos-containing materials (ACM) was conducted in 1990. The results are within a comprehensive report prepared by EG&G Idaho, Inc. The details are presented in the Mather AFB Asbestos Survey Report maintained by the AFBCA/DA Mather Environmental Office. The Air Force intends that any existing damaged or deteriorated friable asbestos is the responsibility of the recipient of Parcel I-2. *(DTSC draft FOST comment 2)*

4.2.10 Lead-Based Paint: The Consumer Product Safety Commission lowered the allowable lead level in non-industrial paint to 0.06 percent by weight beginning after February 27, 1978. These included facilities where consumers have direct access to painted surfaces such as residences, schools, hospitals, parks, playgrounds, and public buildings. The use of lead-based paint declined after 1978. Lead-based painted surfaces by definition contain lead in excess of 1.0 milligram per centimeter squared (1.0 mg/cm²) as measured by X-ray fluorescence (XRF) detector or 0.5 percent (0.5%) lead by weight (i.e. 5,000 ug/G). The Housing Chapel was constructed prior to 1978.

LBP might be present in the Housing Chapel since it was built prior to 1978. Notice will be provided to the Transferee that the Transferee will be responsible for managing all LBP and potential LBP in compliance with all applicable laws and regulations.

Parcel I-2 included no high priority facilities (i.e., residential facilities or those likely to serve as a residence for children under the age of six (6) years). Therefore, a survey for lead-based

paint was not conducted in Parcel I-2; the Air Force has no plans to test for LBP within this parcel.
(EPA draft SEBS Comment 5)

AFBCA personnel conducted lead-based paint (LBP) sampling of housing, schools, day care facilities, and dormitories in May 1994. Those facilities were constructed in the late 1950s and early 1960s and the construction material was mainly wood, cinder block, concrete, and some stucco. Sampling on interior and exterior surfaces found concentration levels ranging from 50 ppm to over 30,000 ppm with one sample above 100,000 ppm. Subsequent soil sampling around the housing areas and playgrounds was accomplished in 1997. Soil sample concentrations ranged from 23 ppm to 355 ppm. Facilities within Parcel I-2 were not included in these surveys because they did not meet the criteria requiring testing as defined by the Lead-Based Paint Poisoning Prevention Act.

Some assumptions can be made based on lead sampling on the base. The housing areas were older, had more wooden and concrete block construction, and could be assumed to have had more extensive maintenance. Since they showed very low levels of lead in the soil compared to the high levels on the exterior paint, it is reasonably assumed that the facilities within Parcel I-2 would have no higher LBP contaminated soil levels. The BRAC Cleanup Team accepted the 1994 and 1997 sampling results and determined that the levels found in the housing area did not require a remedial response. Therefore, exterior lead-based paint contamination in the soil at Parcel I-2 is considered to be of minimal concern.

Since routine maintenance and minor alterations may occur within pre-1978 facilities, it will be recommended to the users that they establish and follow LBP management procedures for surfaces containing LBP. Abatement would only be necessary when these surfaces are not or cannot be properly maintained.

As indicated above, such a condition does not necessarily constitute a release to the environment. There is no reason to suggest that LBP, under normal use and weathering, has migrated to the land adjacent to facilities within Parcel I-2.

4.2.11 Radioactive and Mixed Waste: There have been no radioactive or mixed waste residue sites identified on or adjacent to Parcel I-2 (see EBS Section 3.3.9).

4.2.12 Medical/Bio-hazardous Waste: Medical and/or bio-hazardous waste management activities were not performed on or adjacent to Parcel I-2 (see EBS Section 3.3.7).

4.2.13 Wastewater Discharge: Wastewater generated in Parcel I-2 is discharged via the sanitary sewer system to the Sacramento County regional sewer system. Stormwater is discharged to tributaries of Morrison Creek (see EBS Section 3.3.8).

4.2.14 Other Investigations and Surveys: These premises have not been specifically addressed in any other environmental site assessments, surveys, analyses, or other investigations

undertaken to date. No reported spills, releases or other discharges of hazardous substances, pollutants or contaminants are known to have occurred on the subject premises (see EBS Section 3.3).

4.3 Natural Environment:

4.3.1 Geology: There are no geological resources of concern in Parcel I-2. The American River once traversed the base, and its former streambed channel crosses under the vicinity of nearby Parcel A. There are areas along the south side of the runway in Parcel A that have been proposed for aggregate mining. However, there is resistance to mining of these nearby resources by some individuals due to the presence of vernal pools in the region. Also, Federal laws (the Clean Water Act and the Endangered Species Act) have been promulgated which restrict any attempt to access the valuable underlying geological resources. To date interest in mining any underlying gravel of the property within Parcel I-2 has not been expressed by local aggregate mining companies.

4.3.2 Water Resources: Mather derives its potable water from wells. There are four main base water wells, five MFH area water wells, and one well at the former weapons storage area. The MFH wells are described in Section 4.1.3.

4.3.3 Air Quality: This transfer does not negatively impact air quality or existing air quality control standards. The future occupants of Parcel I-2 will be required to comply with all applicable air quality standards of the Sacramento Metropolitan Air Quality Management District.

4.3.4 Noise: Parcel I-2 is located less than one mile from the main runway for Mather Airport. Noise at Parcel I-2 should be somewhat less than when it was an operational Air Force Base due to commercial aircraft having quieter engines than the former military aircraft engines. The Disposal and Reuse EIS contains noise maps for various adjacent airport operational scenarios which can be used as a guide to determine the level of noise attenuation that should be designed into adjacent facilities (see EIS Section 4.4.4). Noise levels generated by future aircraft operations are anticipated to be an item of significant concern for Parcel I-2 due to the proximity of the airport. The future occupants are anticipated to be owners. They will presumably be less tolerant of the airfield noise than the former military occupants who were assigned to Mather AFB.

The Sacramento Raceway is also located one mile south of Parcel I-2. The noise generated by this raceway was a serious irritant to former military tenants of the MFH area. Mather officials frequently opposed plans to expand the operation of the raceway due to the incompatibility of the noise with the MFH area. Noise from this raceway should also be factored into sound attenuation planned for future upgrades to the Chapel.

4.3.5 Biological Resources: There are no biological resources of concern in Parcel I-2.

4.3.6 Cultural Resources: There are no cultural resources of concern in Parcel I-2. An archaeological survey for the entire Base was conducted by the Archaeological Study Center of California State University, Sacramento in 1985. It concluded that there are no archaeological

resources located within the boundaries of Mather AFB (see EBS, Appendix of Related Environmental Factors, section 1.2.1).

5. ADJACENT PROPERTY: Adjacent properties (within 0.25 miles) presented in this chapter are those which have a contamination potential or where release, disposal, and/or migration of hazardous substance or petroleum products has occurred. Attachment 3 includes the area covered by the 0.25 mile investigation.

5.1 Off-Base Adjacent Properties: There are no off-base resources within 0.25 miles of Parcel I-2.

5.2 On-Base Adjacent Properties: Resources on adjacent properties within 0.25 miles of Parcel I-2 with known or likely potential for concern or that could hinder real properties transactions includes the following IRP Site:

5.2.1 Aircraft Control & Warning Site (OU-1): The edge of the Aircraft Control & Warning Site (AC&W) plume is under Parcel I-2 (EBS Parcel D-3, 7). Attachment 3 indicates the boundary line for the plume at the action level (i.e., 5 ppb TCE). This line represents the area under Parcel I-2 where the concentration level of the plume equals or exceeds the action level. Waste TCE was allegedly disposed of in trenches and a well in the 1950 to 1980 era. TCE contamination was discovered within the potable water well that formerly served the site in 1981. Use of the well was subsequently abandoned and the site was placed on the EPA National Priority List (NPL). The AC&W Pump & Treat remedial cleanup system for this plume became operational in 1995. The system has been determined to be operating properly and successfully (ref. 3.1 (13) and 3.1 (16)).

The contaminant levels from the most recent sampling event indicate that TCE concentrations are no longer detected at monitoring points MAFB 303, 304, and 305 (the former margin of the plume). Migration of TCE is controlled by the operation of the extraction wells so that no TCE migrates beyond Parcel I-2. The latest monitoring data (ref. 3.1 (10)) shows that the highest concentration of TCE near Parcel I-2 is at well MAFB 301 (i.e., 65 ppb). The map at Attachment 5 indicates the location of the injection well and monitoring well within Parcel I-2. It should be noted that this injection well is not being used at this time.

6. CONCLUSIONS

Groundwater contamination is known to have migrated under Parcel I-2 (a portion of EBS Parcel I-1, 2). Remedial actions have been implemented to remove the groundwater contamination; Parcel I-2 is classified as ECC 4, “areas where release of hazardous substances has occurred, and all remedial actions necessary to protect human health and the environment have been taken.” There is still a need for deed restrictions to prevent human exposure and to protect the groundwater remediation system.

7. CERTIFICATION

In my professional judgment and opinion, the facts and conditions depicted are accurate and subject to limitations inherent in the investigation techniques used and any expressed limitations in this supplemental survey.

Prepared by:

BRIAN L. HOVANDER, P.E.
Environmental Engineer

Date

Approved by:

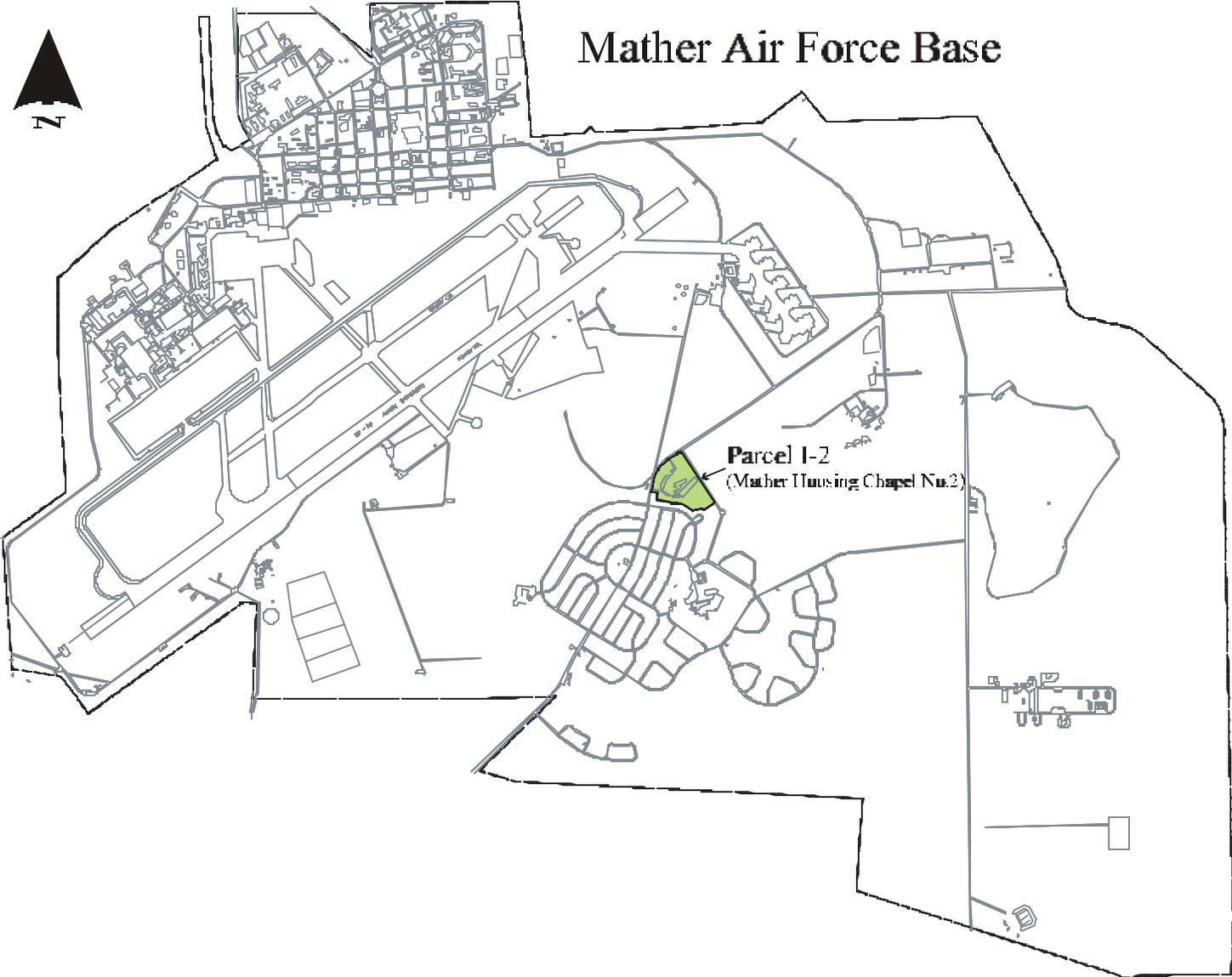
ANTHONY C. WONG
BRAC Environmental Coordinator

Date

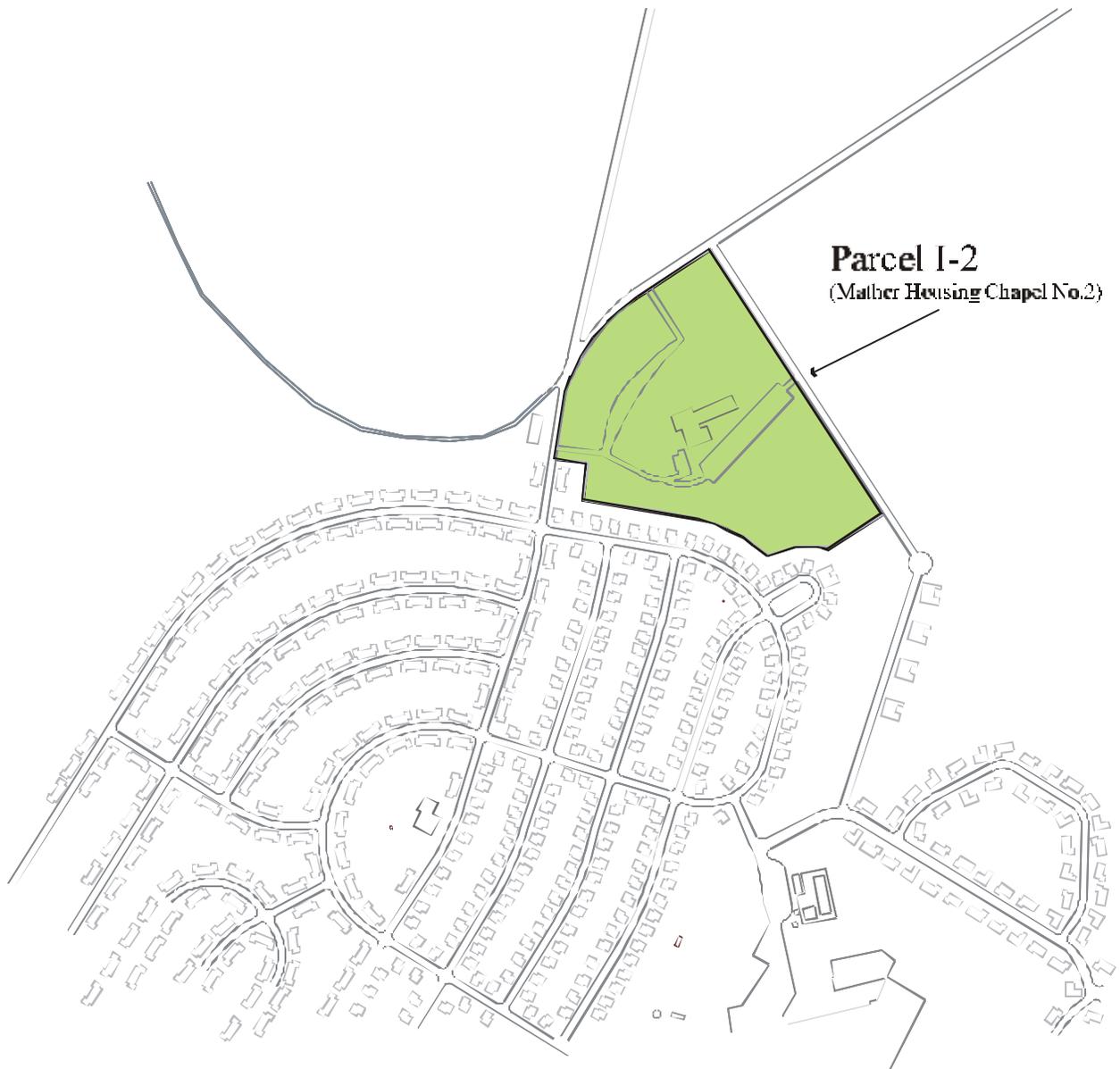
5 Attachments:

1. Base Map
2. Parcel Map
3. IRP Site Map
4. Table 1 - IRP Site List
5. AC&W Well Locations

**BASE MAP
PARCEL I-2 (MATHER HOUSING CHAPEL)**



**PARCEL MAP
PARCEL I-2 (MATHER HOUSING CHAPEL)**



**IRP SITE MAP
PARCEL I-2 (MATHER HOUSING CHAPEL)**

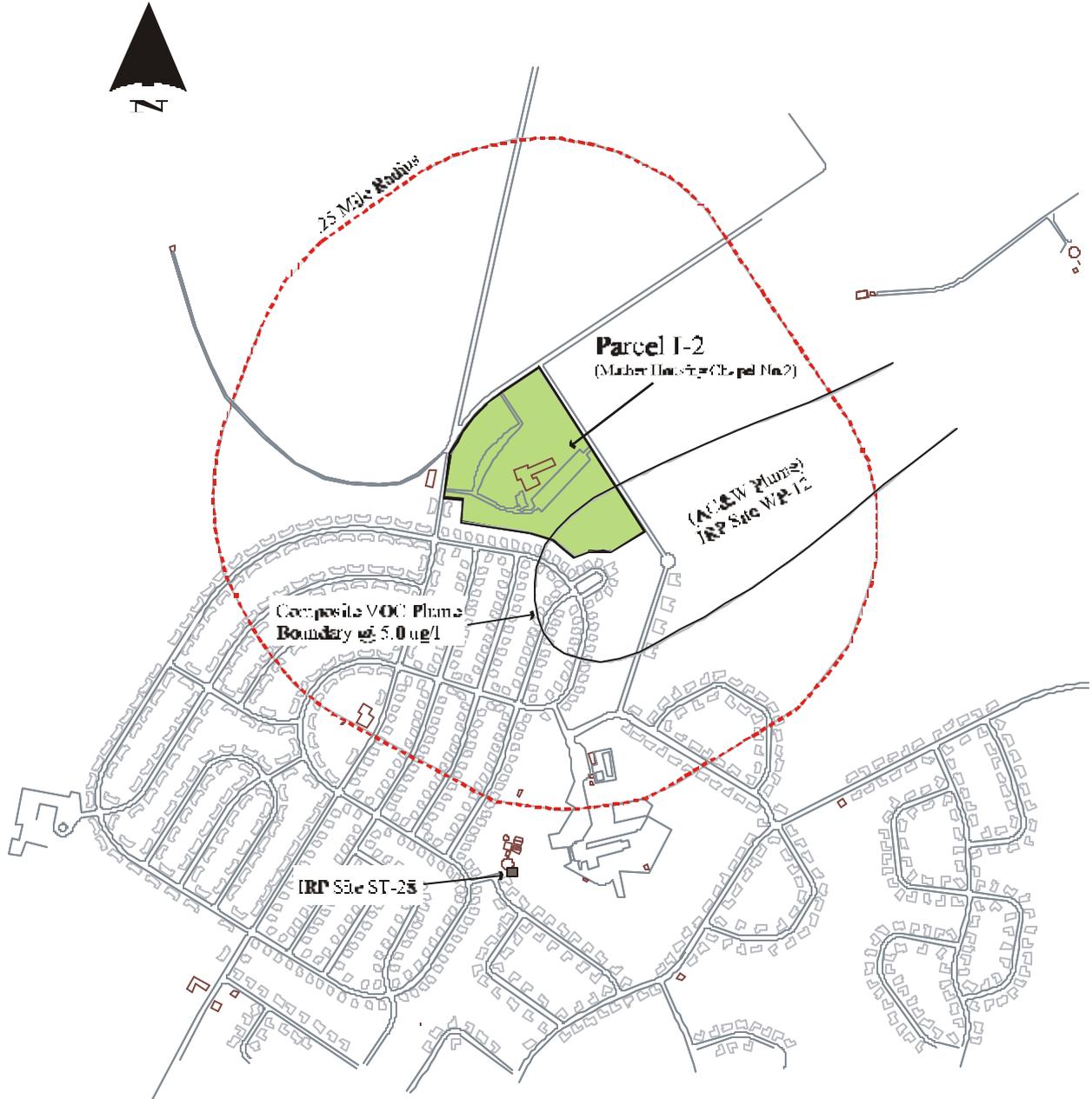


Table 1 - Status of Mather AFB IRP¹ Sites

Site No. ²	Site Type	OU ³	Description	Tank/OWS Year Rmvd.	Status ¹⁵	Cond. ¹¹ Code
LF-01	Landfill	4	Runway Overrun Landfill		No remediation planned (NFA ⁷)	3
LF-02	Landfill	4	“8150” Area Landfill		Landfill removal completed ²¹	4
LF-03	Landfill	4	Northeast Perimeter Landfill No. 1		Landfill remediation completed ¹³	4
LF-04	Landfill	4	N.E. Perimeter Landfill No. 2		Landfill remediation completed ¹³	4
LF-05	Landfill	4	N.E. Perimeter Landfill No. 3		Landfill removal completed ¹⁴	4
LF-06	Landfill	4	Firing Range Area Landfill Sites		Landfill removal completed ¹⁴	4
WP-07	Waste Pit	3	“7100” Area Disposal Site		SVE/bioventing in progress. Landfill remediation completed ¹³ Groundwater remediation in progress	5
FT-08	Fire Training Area	5	Former Fire Training Area 1		No remediation planned (NFA ⁸)	3
FT-09	Fire Training Area	3	Former Fire Training Area 2 (Used 1945 to 1947)		No remediation planned (NFA ⁶)	3
FT-10	Fire Training Area	3	Former Fire Training Area 3 (Used 1947 to 1958)		No remediation planned (NFA ⁶)	3
FT-10C	Fire Training Area	5	Fire Training Area 3 (Revised location)		SVE/bioventing in progress	5
FT-11	Fire Training Area	3	Existing Fire Training Area (Used 1958 to 1993)		SVE/bioventing in progress	5
WP-12	Waste Pit	1	Aircraft Control and Warning Site		Groundwater remediation in progress	4
SD-13	OWS/Drainage Ditch	3	Drainage Ditch No. 1 (east of Facility 2950) & OWS 3990	1992	Soil remediation (excavation) complete ¹⁶	4
SD-14	Drainage Ditch	3	Drainage Ditch No. 2 (northeast of Facility 3975)		No remediation planned (NFA ⁶)	3
SD-15	OWS/Drainage Ditch	3	Drainage (West) Ditch No. 3, incl. OWS (Facility 7039) and U	1994 (UST)	Soil remediation/excavation complete ¹⁷	4

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Site No. ²	Site Type	OU ³	Description	Tank/OWS Year Rmvd.	Status ¹⁵	Cond. ¹¹ Code
RW-16	Radiation	3	Electron Tube Burial Site under Facility 8170		No remediation planned (NFA ⁶)	3
WP-17	Septic Tank	5	Weapons Stg. Area Septic Tank (south of Facility 18080)		No remediation planned (NFA ⁸)	3
LF-18	Landfill	5	Old Burial Site (north of Facility 4120)		SVE/bioventing in progress	5
WP-19	Waste Pit/Tank Site	3	Fuel Tank 4015 & Sludge Burial Site (near Facility 4012)	1994	Soil bioventing in progress ¹⁰	2
ST-20	Tank Site	3/5	Sewage Treatment Plant UST and Sludge Drying Beds	1984	Soil remediation/excavation complete	4
OT-21	Other	3	Asphalt Rubble Storage Site (northeast of Facility 7125)		No remediation planned (NFA ⁶)	3
OT-22	Other	3	Asphalt Rubble Storage Site (adjacent NAV Rd.)		No remediation planned (NFA ⁶)	3
OT-23	Sewer	5	Main Base Sanitary Sewer System		SVE/bioventing in progress	5
ST-24	Acft. Park. Ramp	3	JP-4 Spill Site at SAC Aircraft Parking Apron		No remediation planned (NFA ⁶)	3
ST-25	Tank Site	1	Former UST for MARS Emergency Gen., Facility 10100	1987	No remediation planned (NFA ^{5, 18})	2
ST-26	Tank Site	3	Former UST for ILS Localizer Emerg. Gen., Facility 10072	1988	No remediation planned (NFA ^{6, 18})	2
ST-27	Tank Site	3	Former UST for Comm. Trans. Emerg. Gen., Fac. 10060	1988	No remediation planned (NFA ⁶)	2
ST-28	Tank Site	3	Former UST for Water Supply Emerg. Gen., Facility 16100	1988	No remediation planned (NFA ^{6, 19})	2
ST-29	Tank Site	3	4 Former UST at Military Gas Station, Facility 3167	1994	SVE/bioventing in progress ¹⁰	2
ST-30	Tank Site	1	Former UST Security Police Emerg. Gen., Facility 10300	1988	No remediation planned (NFA ^{5, 18})	2
ST-31	Tank Site	3	Former UST Transmitter Emergency Gen., Facility 10090	1988	No remediation planned (NFA ^{6, 18})	2
ST-32	Tank Site	3	6 Former UST at BX Service Station, Facility 2410	1989/1993	Soil remediation completed FY 96 ¹⁰	2
ST-33	Tank Site	3	6 Former UST at CE Paint Shop, Facility 3308	1989	No remediation planned (NFA ⁶)	2

- D R A F T F I N A L -

Site No. ²	Site Type	OU ³	Description	Tank/OWS Year Rmvd.	Status ¹⁵	Cond. ¹¹ Code
ST-34	Tank Site	3	5 Former UST at AAFES Service Station, Facility 21030	1993	Soil remediation/excavation & bioventing complete ^{10, 20}	2
ST-35	Tank Site	3	4 Former UST at POL Yard 1, Facility 3226	1989	SVE/bioventing in progress ¹⁰	2
ST-36	Tank Site	3	4 Former UST at Old Rail Yard 2, Facility 3286	1989	SVE/bioventing in progress ¹⁰	2
ST-37	Tank Site	3	5 Former UST at Storage Yard, Facility 3389	1989/1993	SVE/bioventing in progress	5
ST-38	Tank Site	3	2 Former UST at Storage Yard, Facility 3388	1989	No remediation planned (NFA ^{6, 19})	2
ST-39	Tank Site	3	8 Former UST at Hazardous Waste Stg. Facility 4305	1993	SVE/bioventing in progress	5
ST-40	Tank Site	3	Former UST for Fly. Trng Classroom Boiler, Facility 3875	1989	No remediation planned (NFA ^{6,9})	2
ST-41	Tank Site	3	2 Former UST at Old Motor Pool, Facility 2995	1989	No remediation planned (NFA ^{6,9})	2
ST-42	Tank Site	3	Former UST at Old Motor Pool, Facility 2898	1989	No remediation planned (NFA ^{6,9})	1 ¹²
ST-43	Tank Site	3	2 Former UST Water Supply Emerg. Gen., Facility 10150	1989/1993	No remediation planned (NFA ^{6,9})	2
SD-44	OWS	3	Former OWS at old Weapons Storage Area, Facility 8540	1989	No remediation planned (NFA ^{6,9})	1 ¹²
ST-45	Tank Site	3	Former Ammonia UST for Missile Facility, Facility 7003	1989	No remediation planned (NFA ^{6,9})	1 ¹²
ST-46	Tank Site	3	Former UST for Alert Crew Emerg. Generator, Fac. 8158	1993	No remediation planned (NFA ⁶)	1 ¹²
ST-47	Tank Site	1	Former UST near Security Police Ops, Facility 10400B	1993	No remediation planned (NFA ⁵)	2
ST-48	Tank Site	3	Former UST for Security Police Ops, Facility 10410	1993	No remediation planned (NFA ⁶)	2
ST-49	Tank Site	3	Former UST for Security Police Ops, Facility 10450	1993	No remediation planned (NFA ^{6,19})	2
ST-50			Same as ST-34			
ST-51	Tank Site	3	Former UST for ILS Glide Slope Emerg. Gen., Fac. 10030	1993	No remediation planned (NFA ^{6,9})	2
ST-52	Tank Site	3	Former UST for Sec. Police Ops Emerg. Gen., Fac. 10400A	1993	No remediation planned (NFA ^{6,9})	2

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Site No. ²	Site Type	OU ³	Description	Tank/OWS Year Rmvd.	Status ¹⁵	Cond. ¹¹ Code
ST-53	Tank Site	3	Former UST for Weapons Stg. Area Boiler, Facility 18051	1993	No remediation planned (NFA ^{6,9})	2
SS-54	Tank Site	3	Haz. Waste Accum. Point at AGE Shop, Facility 4348		SVE/bioventing in progress	5
SD-55	OWS	3	OWS at Facility 7038	NA	No remediation planned (NFA ⁶)	3
SD-56	OWS	3	OWS at former Motor Pool Washrack, Facility 2989	1996	SVE/bioventing in progress	5
SD-57	OWS	3	OWS at Facility 7019	1995	SVE/bioventing in progress	5
SD-58	OWS	3	OWS at Army Helicopter Washrack, Facility 4771	NA	No remediation planned (NFA ⁶)	3
SD-59	OWS	3	OWS at ATC Washrack, Facility 4251	1996	SVE/bioventing in progress	5
SD-60	OWS	3	OWS at Facility 6900 (north side of Facility 7005)	1996	SVE/bioventing in progress	5
SD-61	OWS	3	OWS at Facility 6905 (south side of Facility 7005)	NA	No remediation planned (NFA ⁶)	3
OT-62	OWS	3	OWS at Facility 7110 (Jet Engine Test Stand Fac. 7099)	1994	Soil remediation (exc.) complete ²¹	4
SD-63	OWS	3	OWS & 2 UST at former Auto Hobby Shop, Facility 3320	1995	No remediation planned (NFA ⁶)	3
SD-64	OWS	3	OWS at Fuel Truck Washrack, Facility 4120	NA	No remediation planned (NFA ⁶)	3
SD-65	OWS	3	OWS at Facility 6910 (north corner of Facility 7009)	1994	Soil remediation is complete ²²	4
SD-66	OWS	3	OWS at Facility 6915 (north corner of Facility 7024)	NA	No remediation planned (NFA ⁶)	3
SD-67	Other	5	Sanitary Sewer System in the SAC Area		No remediation planned (NFA ⁸)	3
ST-68	Tank Site	3	18 UST for SAC Area JP-4 Hydrant System	1994	SVE/bioventing in progress	5
OT-69	Burn Pit	3	Ordnance Burning and Detonation Area	Unknown	Soil remediation/excavation complete	4
ST-70	Tank Site	3	Former UST at Dining Hall, Facility 1226	1993	No remediation planned (NFA ^{6,9})	2
ST-71	Tank Site	3	5 Former UST at AVGAS Pumping Station, Facility 3271	1989/1993	SVE/bioventing in progress ¹⁰	2
ST-72	Tank Site	3	Former UST at Water Plant, Facility 3975	1993	No remediation planned (NFA ^{6,9})	2

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Site No. ²	Site Type	OU ³	Description	Tank/OWS Year Rmvd.	Status ¹⁵	Cond. ¹¹ Code
ST-73	Tank Site	3	Former UST for ILS Localizer Emerg. Gen., Facility 10015	1993	No remediation planned (NFA ^{6,9})	1 ¹²
ST-74	Tank Site	3	Former UST for Utility Vault Emerg. Gen., Facility 10065	1993	No remediation planned (NFA ^{6,9})	2
ST-75	Tank Site	3	Former UST at Weapons Storage Area, Facility 18018	1993	No remediation planned (NFA ^{6,9})	1 ¹²
ST-76	Tank Site	3	Former UST at Weapons Storage Area, Facility 18020	1993	No remediation planned (NFA ⁶)	2
ST-77	Tank Site	3	Former UST Army Helicopter Pad, Facility 4853	1993	No remediation planned (NFA ⁶)	2
ST-78	Tank Site	N/A	2 UST East of Facility 2527	1997	Tanks removed in 1997 (NFA ⁹)	2
ST-79	Tank Site	N/A	UST East of Facility 4540	1997	Tank removed in 1997 (NFA ⁹)	2
SD-80	Drainage Ditch	6	South Morr. Cr. Tributary (from Golf Course to Hsg. Gate)		ROD in preparation	5
ST-81	Sewer Plant	5	Sewage Oxidation Ponds		No remediation planned (NFA ⁸)	6
OT-82	Other	5	Golf Course Maintenance Area (near Facility 8869)		Groundwater monitoring ¹⁰	2
SD-83	Washrack	5	Army Aviation Helicopter Washrack (Facility 4771)		No remediation planned (NFA ⁸)	3
SD-84	Sewer Line	5	Sewer Lines SAC Area to Sewage Treatment Plant		No remediation planned (NFA ⁸)	1
SD-85	Storm Drain	6	S. Ditch (N.E. Morr. Cr. Tributary from Fac. 10030 to 10085)		ROD in preparation	5
OT-86	Range	5	Military Small Arm Firing Range (Facility 12500)		Excavation/stabilization complete	4
OT-87	Range	5	Rod and Gun Club Skeet and Trap Range (Fac. 10330)		Excavation/stabilization complete	4
DD-88	Drainage Ditch	6	East Morr. Cr. Tributary from Mather Lake to AC&W Area		ROD in preparation	5
OT-89	Trap Range	6	Old Trap Range at N.E. end of Runway (used 1940 to 1950's)		ROD in preparation	5

¹IRP - Mather AFB 'Installation Restoration Program' for environmental cleanup of 89 sites and contaminated groundwater plumes.

²Sites LF, WP, FT, SD, RW, ST, OT, and SS denote 'Landfill', 'Waste Pit', 'Fire Training', 'Surface Drainage', 'Radioactive Waste', 'Surface Tank', 'Other', and 'Surface Storage', respectively.

³OU - Operable Units 1, 2, 3, 4, 5, and 6 denote the 'AC&W', 'Groundwater', 'Soil', 'Landfill' and 'Basewide' environmental cleanup areas.

⁴RI/FS - 'Remedial Investigation/Feasibility Study' for environmental cleanup.

⁵NFA - 'No Further (CERCLA) Action' site (ref. ROD for AC&W OU, 1993).

⁶NFA - 'No Further (CERCLA) Action' site (ref. ROD for Soil and Groundwater OU, 1996).

⁷NFA - 'No Further (CERCLA) Action' site (ref. ROD for Landfills OU, 1995).

⁸NFA - 'No Further (CERCLA) Action' site (ref. draft ROD for Basewide OU, 1998).

⁹Site has been clean-closed by SCEMD (Sacramento County Environmental Management Department).

¹⁰NFA site under CERCLA because of the petroleum exclusion (see ROD for Soil and Groundwater OU). Site Closure regulated by CVRWQCB.

¹¹CERFA Environmental Condition Code (ECC) of the Property:

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

¹²During the removal of the tanks at Facilities 2898, 7003, 8158, 8540, 10015, and 18018 no leakage or contamination was found to have occurred to contiguous soil. SCEMD concurred and clean-closed these sites.

¹³Gas and groundwater monitoring are in progress.

¹⁴Groundwater monitoring is in progress

¹⁵Shaded cells indicate site remediation is incomplete (i.e., 22 of the 89 IRP sites).

¹⁶Remedial Action Report for Site 13 received U.S. EPA concurrence in letter dated September 27, 2000

¹⁷Remedial Action Report for Site 15 received U.S. EPA concurrence in letter dated September 10, 2001

¹⁸Letter of November 7, 2001, from CVRWQCB closed sites 25, 26, 30, and 31

¹⁹Letter of November 7, 2001, from CVRWQCB closed sites 28, 38, and 49

²⁰Letter of November 20, 2000, from CVRWQCB closed Site 34

²¹Remedial Action Report for Site 2 received U.S. EPA concurrence in letter dated September 25, 2000

²²Remedial Action Report for Site 62 received U.S. EPA concurrence in letter dated June 11, 2001

²²Remedial Action Report for Site 65 received U.S. EPA concurrence in letter dated September 25, 2000

OWS - Oil/Water Separator.

AST - Aboveground (fuel) Storage Tank.

UST - Underground (fuel) Storage Tank.

ROD - 'Record of Decision' documenting the method selected for remediating the contamination.

Shaded IRP status areas - Areas where remediation is incomplete

AC&W WELL LOCATIONS PARCEL I-2 (MATHER HOUSING CHAPEL)

