

Finding of Suitability to Transfer (FOST)

**FOR TRANSFER OF MERCED COUNTY PARCELS
A, C2a (Electrical Substation Only), F1, F2, G1DK, G2, G3, G4,
G5, G6, H2, I and L**

**CONSISTING OF A 1836.48-ACRE SITE WITHIN CASTLE AIRPORT
CONTAINING 185 STRUCTURES**

**TO
THE COUNTY OF MERCED
AT
CASTLE AIRPORT, CALIFORNIA**

Final

August 2004

**Prepared for
Department of the Air Force
Castle Airport, California**

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LIST OF ACRONYMS AND ABBREVIATIONS

µg/L	micrograms per liter
AFB	Air Force Base
AFBCA	Air Force Base Conversion Agency
AFCEE	Air Force Center for Environmental Excellence
AFRPA	Air Force Real Property Agency
AST	above ground storage tank
B#	Building (number)
BEBS	Basewide Environmental Baseline Survey
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene and xylenes
CB	Comprehensive Basewide
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
COC	contaminant of concern
CY	calendar year
DA-#	Discharge Area (number)
DOD	Department of Defense
DP-#	Disposal Pit-(number)
DRMO	Defense Reutilization and Marketing Office
DTSC	Department of Toxic Substances Control
ECC	Environmental Condition Category
EPA	Environmental Protection Agency
ETC-#	Earth Technology Corporation-(number)
F-#	Aircraft Hangar F-(number)
FEIS	Final Environmental Impact Statement
FFA	Federal Facility Agreement
FOST	Finding of Suitability to Transfer
FS-#	Fuel Spill-(number)
GAC	granular activated carbon
HSZ	hydrostratigraphic zone
HUD	Department of Housing and Urban Development
IRP	Installation Restoration Program

LIST OF ACRONYMS AND ABBREVIATIONS

JP-#	Jet Propulsion-(number)
LBP	lead-based paint
LF-#	Landfill-(number)
LTGSP	Long-Term Groundwater Sampling Plan
MCL	maximum contaminant level
NEPA	National Environmental Policy Act
NFA	no further action
OU-2	Operable Unit 2
OWS	oil/water separator
PAH	polychlorinated aromatic hydrocarbon
PCB	polychlorinated biphenyl
PFFA	Petroleum Fuel Farm Area
PHO	petroleum hydrocarbon-only
RCRA	Resource Conservation and Recovery Act
RI/FS	remedial investigation/feasibility study
ROD	Record of Decision
RWQCB	Regional Water Quality Control Board
SBEBBS	Supplement to the Basewide Environmental Baseline Survey
SCOU	Source Control Operable Unit
SDS	Storm Drain System
SROD	Supplemental Record of Decision
SVE	soil vapor extraction
SWMU	Solid Waste Management Unit
TCC-#	Test Center Complex-(number)
TCE	trichloroethene
TSCA	Toxic Substances Control Act
TVPH	total volatile petroleum hydrocarbons
UFL-#	Underground Fuel Leak-(number)
UST	Underground Storage Tank
VSI	Visual Site Inspection

1 INTRODUCTION

1.1 PURPOSE

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 associated improvements at Castle Airport, California, to The County of Merced (Property Recipient) as a public benefit conveyance. The property is described in Section 2. The property will be transferred by deed, and its anticipated use is aviation support, industrial and commercial. Areas within the Castle Airport properties are designated (zoned) for specific uses in the Disposal and Reuse Record of Decision (ROD), dated 3 January 1995.

1.2 REFERENCES

Results presented in this FOST are based on a thorough analysis of information from the following sources and documents:

1. *Final Environmental Impact Statement, Disposal and Reuse of Castle Air Force Base, California* (FEIS) (Air Force Base Conversion Agency [AFBCA], 1994)
2. The FEIS Supplemental Record of Decision, January 2001
3. The *Basewide Environmental Baseline Survey, Castle Air Force Base, California* (BEBS) (EarthTech, 1993), as supplemented by the *Final Consolidated Parcels Supplement to the Basewide Environmental Baseline Survey* (SBEBS) (Jacobs, June 2004)
4. The *Comprehensive Basewide Record of Decision – Part 1 (Groundwater)* (CB ROD–Part 1) (USAF, 1997)
5. *Long-Term Groundwater Sampling Program 2003 Annual Report* (LTGSP 2003 Annual Report) (Jacobs, 2004)
6. The *Source Control Operable Unit Remedial Investigation/ Feasibility Study* (SCOU RI/FS) (Jacobs, 1997)
7. The *Comprehensive Basewide Remedial Investigation/ Feasibility Study–Part 2* (CB RI/FS–Part 2), (Jacobs, 2002)
8. The *Source Control Operable Unit Record of Decision Part 1* (SCOU ROD 1), (WPI, 2002)
9. The *Source Control Operable Unit Record of Decision Part 2* (SCOU ROD 2) (EarthTech, 2003)

10. The Draft Final *Source Control Operable Unit Record of Decision Part 3*, (SCOU ROD 3) (Jacobs, May 2004)
11. The *Demonstration of Remedial Actions Operating Properly and Successfully* (OPS) (Jacobs, 2004), Final dated 19 February 2004.
12. The *Five-Year Review Report (1998 – 2002)* (Five-Year Review) (Jacobs, 2004g), Final dated 23 January 2004.
13. The Disposal and Reuse ROD, January 1995.
14. Information from Castle AFB's Air Force Real Property Agency (AFRPA) staff, which supplemented the BEBS findings
15. Data available from recent investigations at Installation Restoration Program (IRP) sites
16. Various IRP, petroleum hydrocarbon and underground storage tank (UST) site documentation, including work plans, closure reports and agency closure approval letters.
17. The visual site inspection (VSI) reports, October through December 2003 (updated in May – June 2004).

2 PROPERTY DESCRIPTION

The property referred to as Merced County Parcels A, C2a (Electrical Substation Only), F1, F2, G1DK, G2, G3, G4, G5, G6, H2, I and L (hereafter referred to as the County Parcels) is shown on Figure 1 and comprises 1836.48 acres. The boundaries and features (buildings and streets) of the individual parcels are also shown on Figure 1. The County Parcels were used for aviation support and contain 185 structures. The structures contained within the County Parcels are listed in the SBEBS (Table 1-2). The property consists of a major portion of the main base, including the flightline. Infrastructure includes water distribution, sewer system, industrial waste pipeline, electrical distribution, natural gas distribution, telephone system, television cable system, roads, sidewalks, parking lots and storm drains. The Property Recipient has already made improvements to the property including power transmission lines, fiber optic systems, sewer line extensions, a video conference center and dilapidated building demolition.

The property is presently leased to the County of Merced in furtherance of a deed conveyance.

Due to the Comprehensive Environmental Restoration, Compensation, and Liability Act (CERCLA) remedial actions in progress requirements (IRP program), property containing the following active remediation sites is excluded from this FOST and will be addressed in subsequent FOSTs after remediation is completed and the sites are closed:

- Buildings 51/54 Group (B51/B54) (soil vapor extraction [SVE] remediation). The excluded property (22.29 acres), including all of Parcel C2b, is shown on Figure 2.
- Discharge Area 5 (DA-5) (SVE/bioventing remediation).
- Solid Waste Management Unit (SWMU) 4.3 (SVE/bioventing remediation).
- SWMU 4.21 (SVE/bioventing remediation). The combined excluded property (6.58 acres) for sites DA-5 and SWMUs 4.3/4.21 is shown on Figure 3.
- Earth Technology Corporation 8 (ETC-8) (excavation programmed Summer 2004, pending final remedy—clean close expected). The excluded property (2.66 acres) is shown on Figure 4.
- DA-4 (excavation programmed Summer 2004—clean close expected).
- B1314 (excavation planned). The combined excluded property (1.6 acres) for sites DA-4 and B1314 is shown on Figure 5.
- B1350 (SVE remediation). The excluded property (10.76 acres) is shown on Figure 6.

- SS-2 (closure report submitted). The excluded property (0.5 acre) is shown on Figure 7.

The entire areas of those above listed active remediation sites, including all linked sites, are excluded from the transferred property. For the sites with active SVE/bioventing remediation, the excluded property includes areas within the soil gas trichloroethene (TCE)/ total volatile petroleum hydrocarbons (TVPH) plume boundaries, including the fenced pads containing the SVE/bioventing treatment units, and all aboveground pipelines and system components.

When adjacent properties are transferred, the potential impact from any active remediation sites within the County Parcels will be disclosed in separate property transfer documents (SBEBBS/FOST).

Remediation is complete at four SWMU sites listed as ECC 4 in table 2-1 below and closure reports have been submitted for regulatory agency approval. The RWQCB concurred on the closure of the four SWMU sites. The US EPA and DTSC have provided conditional concurrence on the closure based on additional data being submitted; expect full U.S. EPA and DTSC concurrence by no later than end of May 2004. These sites are still classified as ECC 4.

At two sites (DA-4 and B1314), contaminated soil is programmed to be excavated by August 2004. At B1350, SVE termination has not been approved by the regulatory agencies (expected July 2004). A closure report has been submitted for SS-2, but has not been approved by the regulatory agencies (expected June 2004). The current ECC classifications are shown in Table 2-1.

Table 2-1 ECC Classifications for Active Remediation Sites	
ECC 5	ECC 4
DA-4/B1314	SWMU 4.4
B51/54, ETC-8	SWMU 4.6
DA-5/SWMUs 4.3 & 4.21	SWMU 4.16
SS-2, B1350	SWMU 4.22

Property containing petroleum-only corrective action in-progress sites (Table 2-2) are suitable for transfer.

Table 2-2 PHO Corrective Action Sites			
Parcel A		Parcel G2	Parcel G5
B59 (closure report)	B1325/HWS-3	UFL-1/H4	DA-6 (closure sampling/report)
PFFA (B508, B917, DA-7, FS-3, ST-T61/HWS-1/ ETC-4 and SS-8)	FS-4	B785	
TCC-1 (B950, B951 and DA-1)-rebound	JP-4 (rebound)		
B1324	UFL-2		
	UFL-3		

SVE treatment was initiated at sites B1324, UFL-1/H4 and UFL-3 in April 2004. Sites JP-4, B59, TCC-1 and DA-6 have closure/rebound reports pending and are expected to be regulatory closed in 2004. The other PHO sites are currently undergoing active treatment and will likely not be closed prior to property transfer, but closure is expected in 2005 (except PFFA [2006]). These active PHO sites are listed below in table 2-3 and data is also presented to demonstrate cleanup success and the relatively minor amounts of petroleum products remaining.

Table 2-3 Remedial Progress at PHO SVE/Bioventing Sites					
Site	Influent TVPH				TVPH Reduction (%)
	Initial Concentration		Current Concentration		
	ppmv	Date	ppmv	Date	
B785	925	Oct 99	13	Feb 04	99
B1325	16,000	Oct 99	370	Mar 04	98
FS-3	3,500	Sep 02	180	Mar 04	95
FS-4	2,500	Nov 02	500	Mar 04	80
JP-4 North	3,100	Oct 02	17	Mar 04	99
JP-4 South	3,800	Oct 02	150	Mar 04	96
PFFA	1,300	Nov 02	660	Feb 04	49
TCC-1	4,500	Nov 02	110	Mar 04	98
UFL-2	6,600	Nov 01	380	Mar 04	94

As shown in the preceding table, influent TVPH concentrations have decreased by at least 80% at all PHO SVE/bioventing sites, except PFFA. This demonstrates that significant remedial progress has been achieved and SVE/bioventing remediation is nearing completion at these PHO sites.

3 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE

The environmental impacts of this proposal to transfer have been adequately analyzed and disclosed in compliance with the National Environmental Policy Act (NEPA). These impacts are categorically excluded from further analysis based on similar land use (CATEX#A2.3.11, AFI 32 7061). Based on this analysis, the environmental impacts of proceeding with the transfer are not sufficiently adverse to human health and the environment to outweigh the other advantages to the community and the public interest of this transfer, or to prevent the transfer of the property.

4 ENVIRONMENTAL CONDITION OF THE PROPERTY

The Basewide Environmental Baseline Survey (BEBS) (December 1993) identified the environmental condition of all land within the County Parcels as Department of Defense (DOD) Environmental Condition Category (ECC) 7, ECC 6, ECC 5 or ECC 2.

The ECC categories are defined in the Consolidated Parcels SBEBs (Section 1) and the 1993 classification for each Castle facility is listed in Table 1-2 (SBEBs). In 1996, the ECC categories were redefined. Because the environmental status of IRP sites has changed due to remedial actions and revised ECC categories, the current ECC classifications for IRP sites and property within the County Parcels are presented in this section. The updated ECC classifications (2003) for Castle facilities are also listed in Table 1-2 (SBEBs).

All portions of the County Parcels where storage, release or disposal of hazardous substances or petroleum products has not occurred, including migration of these substances from adjacent areas, are classified as ECC 1 (Parcel L only). These areas have never been, and are not now, IRP or petroleum hydrocarbon only (PHO)/UST sites.

All non-CERCLA PHO (including CERCLA exempt sites) and UST sites (active and closed) are classified as ECC 2. Lists of CERCLA and PHO/UST sites in each ECC category are provided in the Consolidated Parcel SBEBs (Jacobs, 2004), and these sites are shown on SBEBs Figures 2 and 3. The status of these sites is summarized in Section 5.3 (PHO sites) and Section 5.5 (USTs). These sites are not part of the CERCLA process and can be transferred by deed without a demonstration of remedial systems operating properly and successfully. The PHO sites undergoing corrective actions and active UST sites outside the groundwater TCE plume boundaries are shown on Figure 8.

Portions of the County Parcels with only NFA sites (no action) are classified as ECC 3.

As a result of removal and remedial actions, the bulk of the County Parcels is classified as ECC 4. This categorization includes all no further action (NFA)—response complete IRP sites and all County Parcels property inside the groundwater TCE plume boundaries. The areas of the County Parcels inside the present groundwater TCE plume maximum contaminant level (MCL) boundaries (Q4/03) are shown on Figure 8. Also shown are ECC 4 IRP sites outside the groundwater TCE plume boundaries.

To address groundwater TCE contamination, three treatment systems have been constructed and operated: the Operable Unit 1 (OU-1) system (1994), the OU-2 system (1996), and the Phase 2 system (1997) (later expanded and redesignated the Phase 3 system in 2000). Wellhead treatment units have also been installed at localized hot spots. The OU-2 and Phase 3 systems remain in operation; the OU-1 system had met its objective of hot spot removal and was shut down, with regulatory agency approval, at the end of May 2003. Figure 8 shows the groundwater treatment systems within the County Parcels. Documentation that the Main Base Plume groundwater remedial action is operating properly and successfully is provided in the *Demonstration of Remedial Actions Operating Properly and Successfully* (Jacobs, 2004).

The category ECC 4 is also applied to Landfill 4 (LF-4) and associated sites Disposal Pit 5 (DP-5) and DP-6 (shown on Figure 8). A consolidation and capping removal action has been completed at these sites and an approved post-closure maintenance and monitoring program has been implemented. Documentation that the action is operating properly and successfully is provided in the *Demonstration of Remedial Actions Operating Properly and Successfully* (Jacobs, 2004). Institutional controls to be implemented for LF-4 are described in the Draft Final SCOU ROD 3 (May 2004).

Some active remedial action sites are classified as ECC 4 because the sites are expected to be closed prior to the property transfer (see SBEB Section 4.3.1.3 for details). However, this property will not be transferred until the closure reports are approved.

The excluded CERCLA remedial action sites are classified as ECC 5 (shown on Figure 8). Those sites may not be transferred by deed until remedial actions are completed and the closure reports are approved.

Based on the ECC classifications for sites/property within each parcel, an overall ECC classification was determined for the transferred property within each parcel. Overall designations represent the most restrictive classification (highest ECC number) within that parcel. Property over the groundwater TCE plume has an overall classification of ECC 4.

The overall ECC classifications for the County Parcels are listed in Table 4-1.

Table 4-1 Overall Environmental Condition Category Classification		
Parcel	ECC Classification	Rationale
A, C2a, F1, G1DK, G2, G3, G5, G6, H2 and I	ECC 4	Property over the groundwater TCE plume. Parcels contain IRP sites (NFA–no action or remedial action completed; remedial action, OPS and PHO sites).
C2b	ECC 5	Parcel contains an IRP site (remedial action in progress) and lies over the groundwater TCE plume. This parcel is excluded from transfer until remedial actions are complete.
F2 and G4	ECC 4	Parcels contain IRP sites (NFA–remedial actions completed). Property outside groundwater TCE plume boundary.
L	ECC 1	No IRP sites in parcel. No storage/release of hazardous substances or petroleum products. Property outside groundwater TCE plume boundary.

Based on the ECC classifications for individual parcels, the overall classification for the County Parcels is ECC 4. Therefore, the property is eligible for deed transfer, except Parcel C2b (ECC categories 1 through 4 may be transferred).

5 DEED RESTRICTIONS AND NOTIFICATIONS

The environmental documents listed in Section 1.2 were evaluated to identify environmental factors (Attachment 1) 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 Property Recipient. This section discusses the factors requiring either deed restrictions or specific notifications, as identified in Attachment 1. Please refer to the BEBS, SBEBBS, and applicable VSI reports for specific information on each resource category. Details pertaining to deed restrictions are found in the OPS (Jacobs, 2004).

The deed will contain covenants stating that all necessary remedial actions have been taken (or are in progress) and satisfy OPS requirements and that any response action or corrective action found to be necessary after the date of such sale or transfer shall be conducted by the Air Force. CERCLA sites with active soil remediation systems in operation will be excluded (as will removal action sites ETC-8, DA-4, B1314 and SS-2) from the transferred property.

Land use or institutional controls that prohibit the penetration of the LF-4 cap (except for maintenance and/or environmental functions) and any use of the real property comprising the LF-4 site that would jeopardize the cap's integrity will be incorporated into any deed or other conveyance document that transfers any interest in the real property comprising LF-4. Imposition of such controls is a requirement of the Draft Final SCOU ROD 3 (Jacobs, 2004). ICs for LF-4 will include the similar following language in the deed:

- Grantee covenants for itself and its successors and assigns that it will not use LF-4 for residential purposes (permanent or temporary, including mobile or modular homes), for traditional or private schools for any persons under 18 years of age, for day care for children, or for a hospital for human care.
- Grantee covenants for itself and its successors and assigns that it will not conduct any excavation, grading, trenching, or other activities on LF-4 that could impact or restrict access to the landfill, the perimeter groundwater monitoring system, the drainage, sub drainage and erosion controls, or otherwise disturb equipment associated with monitoring or maintaining the property (to be surveyed).
- Grantee covenants for itself and its successors and assigns that it will not remove, disturb, or otherwise interfere with fences or other barriers to access to LF-4 or signs notifying the public of the landfill.

- Grantee covenants for itself and its successors and assigns that it will not conduct or allow any excavation, grading, trenching, or other earth movement that will change the grade of LF-4, cause any ponding of surface water, or block surface drainage.
- Grantee covenants for itself and its successors and assigns that it will not extract groundwater under the Property or apply water or other fluid to the surface of LF-4, including irrigation.
- Grantee covenants for itself and its successors and assigns that it will not remove, replace, or otherwise alter the existing landfill cover at LF-4.

The Air Force will enter into a Land Use Covenant (LUC) with the State when the deed is recorded that prohibits LF-4 property from being used for residential purposes, schools, day care centers or hospitals. The LUC will also prohibit the drilling of groundwater wells and use of extracted groundwater due to the contaminated groundwater plume (TCE) which lies underneath the transferred property.

To protect human health and the CERCLA IRP remedy in place that is properly and successfully remediating the groundwater beneath portions of the Castle Airport properties, a deed restriction is required to prevent the drilling of groundwater wells within the property until the contaminated groundwater plume beneath the Castle Airport County Parcels is remediated. This institutional control is specified as part of the selected remedy in the Comprehensive Basewide Part 1-Groundwater Record of Decision for the LF-4 plume and is part of the preferred alternative for the Main Base plume specified in the CB RI/FS Part 2, expected to be memorialized as a selected remedy in the CB Part 2 ROD.

A property restriction that protects the integrity of soil/groundwater remedial treatment systems will be incorporated into any deed that transfers any interest in the real property comprising any area with continuing remedial actions. This restriction applies to groundwater and SVE/bioventing treatment systems, including PHO sites, and the LF-4 cap. The deed for the County Parcels will contain provisions to permit the Air Force and/or its designee, the Environmental Protection Agency (EPA) and the State of California and its and their respective officials, agents, employees, contractors and subcontractors, the right of access to the property to conduct activities related to the installation, inspection/repair and sampling of remediation treatment systems. The Air Force will own and operate these remedial treatment systems until remediation is completed and the sites are closed.

The Air Force has determined that the remaining factors listed in Attachment 1 pose no threat to human health or the environment and, therefore, require neither deed restrictions nor notifications to the Property Recipient.

5.1 HAZARDOUS SUBSTANCES NOTIFICATION

A hazardous substance notification is required by 40 CFR Part 373.1 for the sale or transfer of any real property owned by the United States where during the time of ownership any hazardous substance was stored in quantities exceeding 1,000 kilograms or the hazardous substance's reportable quantity found at 40 CFR Part 302.4 (whichever is greater) or are known to have been released or disposed of in quantities greater than or equal to the hazardous substance's reportable quantity found at 40 CFR Part 302.4.

Past activities on the property included the storage, use and the disposal of hazardous substances. A list of hazardous substances known to have been stored within the County Parcels during Air Force operation and removed prior to base closure in October 1995, is in the Castle BEBS dated 1993. A listing of hazardous substances other than petroleum, from leaks, disposal, or discovered during remediation and removed is provided in Attachment 2, Notice of Hazardous Substances Stored/Disposed/Released. Except for potentially hazardous substances listed below, the property is not now contaminated with hazardous substances. Transfer documents will include a hazardous substance notice listing the type and quantity of hazardous substances and the date of disposal. The following conditions, regarding possible recent releases of hazardous substances to the environment on property leased to the County of Merced, were identified during the VSIs in May through July 2003. The storage/release issues have been updated based on recent VSIs (October through December 2003; May through June 2004) and updated site inspections in March 2004. As noted below, the County of Merced has taken actions to address these issues, including removal of improperly stored items and issuing citations to former tenants for violations. The County of Merced is responsible for all actions necessary for the proper storage, analysis, disposal and cleanup of the following conditions:

Parcel A

- Drums and electrical transformers/switches at B59, B79 and B1348 were sampled and analyzed for PCBs and other hazardous substances. Soil beneath one leaking drum was also sampled and analyzed for hazardous substances. None was detected above regulated levels. The items were removed by Merced County on 4 March 2004 and transported off-site for disposal.
- At B325, stains are present on the floor in the paint storage room and on asphalt outside the building (see Attachment 2).
- At B1323, there are numerous drums and 5-gallon buckets containing unknown liquids being stored. Stains are visible on the asphalt in the yard adjacent to the drum/bucket

storage area (see Attachment 2). There is also an unidentified solid residue on the floor inside B1323.

Parcel F2

- At B871, areas of stained soil are visible.

Except as noted above, the identified hazardous substance storage issues have not changed since the VSIs in May through July 2003 and updated March 2004.

5.2 INSTALLATION RESTORATION PROGRAM (IRP) AND AREAS OF CONCERN (AOC)

IRP sites are located within the boundaries of the County Parcels where storage or release of hazardous substances occurred. Except for the excluded property (active SVE remediation sites, ETC-8 and SWMUs 4.3 and 4.21), all removal or remedial actions to protect human health and the environment, in accordance with CERCLA §120(h)(3), have been taken for the property and remediation treatment systems in place are operating properly and successfully. No further action is required at these IRP sites. Corrective actions at non-CERCLA PHO sites are exempt from these provisions. The determination that all remedial action necessary to protect human health and the environment is supported by the SCOU ROD Part 1, September 2002; the SCOU ROD Part 2, July 2003; the CB ROD Part 1, January 1997 (groundwater only); and the *Demonstration of Remedial Actions Operating Properly and Successfully*, February 2004. The active CERCLA and PHO remedial/corrective action sites outside the groundwater TCE plumes are shown on Figure 5. The sites and respective remedial/corrective actions are discussed in the Final Consolidated Parcels SBEBS (Jacobs, 2004).

A groundwater TCE plume exceeding the MCL (5 micrograms per liter [$\mu\text{g/L}$]) remains beneath portions of the County Parcels. Groundwater in the vicinity of this property is monitored to determine whether contaminants are migrating and concentrations are declining. To protect human health, a deed restriction is required to prevent the drilling of groundwater wells within the MCL plume until it is remediated. TCE is being removed by granular activated carbon (GAC) adsorption (pump and treat) and treated groundwater is reinjected outside the plume. Public drinking water is supplied from uncontaminated wells, but some private wells within the TCE plume have wellhead treatment units installed.

Covenants will be included in the deed to ensure that any response or corrective actions that are the responsibility of the Air Force, 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 for groundwater/vapor well sampling, well maintenance, well closure or in any case in which any such response or corrective action is found to be necessary, or where such access is necessary to carry out a response or corrective action on adjoining property.

5.3 PETROLEUM PRODUCTS AND DERIVATIVES

Petroleum-contaminated sites are present within the County Parcels. Closure of active PHO sites is not required for property transfer, however remaining cleanup of these sites will continue after transfer until closure is achieved. Corrective action measures are in progress at the following 14 locations. The active PHO sites outside the groundwater TCE plumes are shown on Figure 8.

At Disposal Area-1/Test Center Complex (TCC)-1 (DA-1, B950, and B951), a corrective action by a catalytic oxidizer SVE system is in progress. The site is a former jet engine test stand. Fuels such as JP-4, hydraulic fluids and lubrication oils were used at the site. The probable source of contamination is former UST leaks and multiple spills. Site closure is expected in 2004.

At Disposal Area 6 (DA-6), the contaminants of concern (COCs) are potential fuels from the adjacent PFFA. At DA-6 residual surface contamination from wastewater evaporation ponds has been removed by the Air Combat Command. An interim removal action by bioventing at depth was planned. However, very low concentrations of fuels in soil gas indicate that this site is probably a candidate for NFA status. The planned remedial action has been replaced by investigative/closure soil boring sampling. Site closure is expected in 2004.

At the PFFA (DA-7, PFFA, B508, B917 and SS-8), a corrective action by a catalytic oxidizer SVE system is in progress. These sites are parts of the petroleum, oil and lubricants (POL) and petroleum fuel farm area. The initial remediation program was conducted by Lawrence Livermore Laboratory under an Air Force Center for Environmental Excellence (AFCEE) contract. It was a study of SVE and bioventing enhanced intrinsic remediation. The probable source of contamination is multiple fuel pipeline leaks, former UST leaks and spills of fuels, oils and lubricants. At present, petroleum hydrocarbons as fuels and benzene,

toluene, ethylbenzene and xylene (BTEX) compounds are being removed by the SVE system. Site closure is expected in 2006.

At Fuel Spill 4 (FS-4), a corrective action by a catalytic oxidizer SVE system is in progress. The probable source of contamination is aviation jet fuel from pipeline leaks and aircraft fuel dumping. Site closure is expected in 2005.

At Underground Fuel Leak-1 (UFL-1/H-4), a corrective action (continuation of original removal action) is in progress to monitor intrinsic remediation with annual soil gas sampling. UFL-1/H-4 is the site of a former gas station. The contaminants of concern are fuels from a leaking UST (removed) and spills associated with gas station operations. Monitoring has indicated that natural attenuation is occurring, however, a more active remediation method is needed for timely closure. An SVE treatment system will be installed in April 2004. Site closure is expected in 2005.

At Underground Fuel Leak-2 (UFL-2), a corrective action by a natural gas heated catalytic oxidizer SVE system is in progress. The source of contamination is an aviation jet fuel (JP-4) pipeline. Site closure is expected in 2005.

At two locations on the JP-4 flightline pipeline (JP-4), a corrective action by a GAC SVE system is in progress. Aviation jet fuel contamination is from pipeline leaks. Site closure is expected in 2004.

At Underground Fuel Leak-3 (UFL-3)), a corrective action (continuation of original removal action) is in progress to monitor intrinsic remediation with annual soil gas sampling. The probable source of contamination is aviation jet fuel and diesel from pipeline, aboveground storage tank (AST) and UST leaks and surface spills. Monitoring has indicated that natural attenuation is occurring, however, a more active remediation method is needed for timely closure. An SVE treatment system will be installed in April 2004. Site closure is expected in 2005.

At Building 59 (B59), a removal action by excavation that removed an oil/water separator (OWS) (SWMU 4.4) was completed. Additional excavation and removal of all visible contamination was performed. Further soil boring sampling is required to meet new RCRA requirements. Oils, fuels and soaps were removed from wastewater at this site and fuels

leaked from the OWS. Closure sampling for petroleum contamination was completed, and the closure report has been submitted for regulatory approval.

At Structure T61 (ST-T61/HWS1 and ETC-4), a corrective action (continuation of original removal action) is in progress to monitor intrinsic remediation with annual soil gas sampling. Monitoring has indicated that natural attenuation is occurring; however, a more active remediation method (SVE) is needed for timely closure. One vapor extraction well at the site has been connected to the PFFA SVE system and another vapor extraction well will be installed. The source of contamination is former UST leaks and there is evidence of fuel migration in the soil gas. This site will be closed with the PFFA site.

At Building 1324 (B1324), a corrective action (continuation of original removal action) is in progress to monitor intrinsic remediation with annual soil gas sampling. The sources of contamination are a former UST and OWS. Monitoring has indicated that natural attenuation is occurring, however, a more active remediation method (SVE) is needed for timely closure. An SVE treatment system will be installed in April 2004. Site closure is expected in 2005.

At Building 1325/ HWS-3 (B1325), a corrective action by a catalytic oxidizer SVE system is in progress. B1350 is a former military refueling station. The source of contamination is former UST leaks. Site closure is expected in 2005.

At Fuel Spill 3 (FS-3), a corrective action by a catalytic oxidizer SVE system is in progress. FS-3 is a former flightline aviation fuel pumping station. The source of contamination is former piping system leaks. Site closure is expected in 2005.

At Building 785 (B785 USTs) a corrective action by a catalytic oxidizer SVE system is in progress. The USTs were removed and the site excavated. B785 is a former military base exchange gasoline service station. The source of contamination is former UST leaks. Site closure is expected in 2005.

The Air Force will own and operate the treatment systems and all aboveground components until the sites are closed. 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 corrective action activities or jeopardize the protectiveness of those remedies, as previously

specified in this section. The deed will reserve a non-exclusive easement to allow continued access for the Air Force (or its designated contactor) and regulatory agencies to monitor the effectiveness of cleanup, perform five-year reviews, and/or take additional corrective actions.

5.4 OIL/WATER SEPARATORS (OWSs)

Four OWSs, located at B340 (SWMU 4.12), B1336, B1509 (SWMU 4.20) and B1530, remain on the property to be conveyed. All existing OWSs are located in Parcel A. All OWSs are programmed to be removed by the Air Force by August 2004 (Note: Merced County has requested to retain OWS 1336 for property reuse). Other OWSs at B88 (SWMU 4.6), B850 (Parcel G3) and B1454 were previously removed and site closure is pending.

5.5 UNDERGROUND AND ABOVEGROUND STORAGE TANKS (USTS AND ASTS)

USTs and/or ASTs are located on the property (in Parcel A only). The only remaining USTs are at B340 (inactive), B909 (unregulated), B1336 and B1509. The Air Force plans to remove these USTs in 2004. The possible existence of a UST at B1550 has not been confirmed. A geophysical survey and exploratory trenching will be conducted to locate it. If found, the UST is programmed to be removed in 2004.

Former USTs B65 and B1345 were removed, but further confirmation sampling and/or closure report submission is required to close these UST sites. The former UST sites at B785 and B1325 have active SVE systems operating as a corrective action in the State of California Leaking Underground Fuel Tank (LUFT) program to remove vadose zone fuel contamination remaining after removal by excavation (see Section 5.3 for details). The existing USTs and former UST sites with SVE systems are shown on Figure 8.

The status of 26 remaining ASTs in the County Parcels is listed in the Consolidated Parcels SBEBS (Table 4-13) (Jacobs, 2004). ASTs at B65 (6), B1345 and B1509 have been removed, and regulatory approval of site closure reports is pending. An AST at B1530 is programmed to be removed in 2004.

The Property Recipient will be responsible for complying with all applicable federal, state, and local laws relating to the use of these tanks.

5.6 ASBESTOS-CONTAINING MATERIAL (ACM)

The property to be conveyed contains asbestos-containing material (ACM). Buildings with damaged ACM were identified during the VSIs (May through July 2003) and are listed by parcel in Table 5-1.

Table 5-1 Buildings with Damaged ACM¹		
Parcel A		
B47	B1323	B1532
B325	B1324	B1535
B949	B1335	B1540
B1253	B1350	B1545
B1314	B1360	B1582
B1319	B1509	B1907
Parcel F1		
B362	B480	
B372	B482	
B373		
Parcel G1DK		
B425		
Parcel J1b		
B3000 – B3546		
Note		
¹ Damaged ACM observed during VSIs (May through July and November 2003). No change March 2004.		

Above buildings were identified to be in good condition with no damaged ACM upon the County of Merced entering into a lease in furtherance of conveyance with the Air Force (1995). This agreement identified the County of Merced as responsible for any damaged or deteriorated ACM abatement required.

ACM in Structures or Buildings: Based on an inspection of the property and a review of the environmental baseline survey reports, the ACM located in structures, other than listed above, on the property is in good condition and not damaged or deteriorated to the extent that it creates a potential source of airborne fibers.

ACM in Utility Pipelines: No CERCLA response action for ACM in below ground utility pipelines is required at this time. 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 the 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 property recipients 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 property recipients that the Air Force will not be responsible for the ACM in utility pipelines.

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 environmental baseline survey reports, no such locations are specifically known on these parcels. 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 property recipient or subsequent transferees during ground disturbance activities. The property recipient and subsequent transferees will be cautioned in the deed to exercise care during ground disturbing activities. The property recipient 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 property recipients or subsequent transferees will be required to allow the Air Force a reasonable opportunity to investigate and, if a CERCLA remedial action is necessary, to accomplish it.

General: The deed will contain a provision stating that the property recipient 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 that the Air Force will perform or fund any remediation to accommodate a change in land use desired by the property recipient that is inconsistent with use restrictions or covenants contained in the deed or other related property transaction documents.

5.7 LEAD-BASED PAINT (LBP) - TARGET HOUSING

No residential housing units are included in the County Parcels.

5.8 LEAD-BASED PAINT (LBP) - FACILITIES OTHER THAN HOUSING

Lead-based paint (LBP) might be present in facilities other than housing in the County Parcels, as described in the BEBS, Castle AFB, dated December 1993 and Consolidated Parcels SBEBS dated June 2004. Facilities built prior to 1978 (likely to have LBP) are identified in Table 1-2 of the Final Consolidated Parcels SBEBS. The Property Recipient will be notified through the BEBS, SBEBS and VSIs of the possible presence of LBP in these facilities. The VSI reports dated October through December 2003 observed problems with peeling interior/exterior paint that is potentially LBP. LBP abatement is the responsibility of the Property Recipient. Notice will be provided to the Property Recipient that the Property Recipient will be responsible for managing all LBP and potential LBP in compliance with all applicable laws and regulations.

The disclosure and notification requirements for lead-based paint are in accordance with the most recent AFRPA policy on management of LBP: Operating Procedures for the Management of Lead-Based Paint at Air Force Base Realignment and Closure Installations, May 2001. These procedures incorporate the DoD/EPA Field Guide, HUD regulations, and EPA's TSCA 403 standards. 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. The Deed will contain notification requiring that if after redevelopment of the property the transferee or any successor in interest proposes to use the property for residential purposes (to include traditional or private schools, day care facilities for children, and hospitals for human care) the Transferee will first evaluate for and abate any soil-lead hazards and obtain approval for the proposed reuse from the USEPA and DTSC.

Language will be included in the deed to ensure that the Property Recipient acknowledges that the Air Force assumes no liability for damages for personal injury, illness, disability, or death to the Property Recipients' employees, or to any other person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with LBP on the property, whether the Property Recipient has properly warned, or failed to properly warn, the persons injured.

5.9 POLYCHLORINATED BIPHENYLS (PCBS)

There are six sites in the County Parcels with previous polychlorinated biphenyl (PCB) contamination due to leaking electrical transformers. These sites, designated as PCB-1 and PCB-9 (Parcel A); PCB-8 (Parcel F1); B871 (Parcel F2); PCB-5 (Parcel G2); and PCB-6 (Parcel G3) were regulatory approved NFA after removal actions (excavation) or additional sampling (PCB-6) were completed.

The County of Merced stored surplus transformers at two of their leased facilities in Parcel A (PFFA area near B59 and B79, and at B1348), as discussed in the VSIs and Section 5.1 of this document. In September 2003, electrical transformers/switches (40, including 5 transformers previously stored near B1348) in the Merced County Maintenance Yard (between B59 and B79) were sampled and analyzed for PCBs. None of the transformers/switches was leaking. Oil from one electrical switch contained PCBs at 34 ppm; all other samples contained < 4.2 ppm PCBs; most samples were ND. Results for these samples are reported in Project Note #004: Transformer and Drum Sampling for PCBs in the Merced County Maintenance Yard (Jacobs, 2003). All items were removed from the yard by Merced County on 4 March 2004 and transported off-site for disposal.

The County Parcels include buildings, facilities, and equipment that may contain PCBs within fluorescent light fixture ballasts. Any facilities constructed prior to 1979 are suspected to have fluorescent light ballasts that contain PCB oils, unless the light fixtures have been replaced. The deed will include language ensuring that the Property Recipient agrees that in its use and occupancy of the property, it will comply with all applicable federal, state, and local laws relating to PCBs contained in fluorescent light fixture ballasts. Further, the Property Recipient will acknowledge that the Air Force assumes no liability for damages for personal injury, illness, disability or death to the Property Recipients' employees, or to any other person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with PCBs contained in fluorescent light fixture ballasts on the property, regardless of whether the Property Recipient has properly warned, or failed to properly warn, the persons injured.

5.10 RADON

In December 1987, the Air Force tested for radon gas in certain facilities on the property. The Property Recipient will be notified through the BEBS and SBEBS of all available and relevant radon assessment data.

5.11 FLOODPLAINS

Certain areas on the property are located within a 100-year floodplain, including part of the southeastern portion of the County Parcels (areas within Parcels A and L). The floodplain extent and boundaries shown in the Consolidated Parcels SBEBS (Figure 4) are based on the FEMA Flood Insurance Rate Map for Merced County (August 1995). The Property Recipient will be responsible for complying with any applicable laws and regulations relating to construction activities within the floodplain. Executive Order 11988 provides federal agency responsibilities for managing floodplains, including the strict control of construction located within the floodplains.

5.12 SANITARY SEWER SYSTEMS (WASTEWATER)

Certain facilities on the property are connected to a sanitary sewer. The Property Recipient will be responsible for submitting any required applications for discharging wastewater to the City of Atwater sanitary sewer system and for meeting all applicable wastewater discharge permit standards.

5.13 SEPTIC TANKS (WASTEWATER)

A septic tank is present on the property near B1596 (Parcel A). The Property Recipient will be notified through BEBS, and SBEBS of the location and status of the tank, and will be responsible for complying with all applicable laws and regulations pertaining to discharge and maintenance of the septic tank.

5.14 STORM DRAIN SYSTEM (SDS)

The storm water drainage system within the County Parcels is regulated by a waste discharge permit. The SDS discharges to nearby agricultural irrigation canals. The County

of Merced has applied for a waste discharge requirement permit as the future discharger when the property is transferred.

5.15 RADIOACTIVE WASTES

There is no record of storage, release or disposal of radioactive waste within the County Parcels. During the excavation of waste materials at LF-2 and LF-4 in Parcel A, removed materials were screened for radioactivity and no elevated radioactivity was detected. During the excavation of LF-1 in Parcel G4 in 1999, three radioactive sources were removed and analyzed for disposal.

5.16 ORDNANCE

There is a no record of storage, release or disposal of ordnance within the County Parcels. During the excavation of LF-2 (Parcel A) in 1997, four 55-gallon drums containing spent brass shell casings were uncovered. After examination, the materials were found to be non-hazardous and were reburied at LF-4 (Parcel A). During trenching activities at LF-1 in Parcel G4 in 1998, a box of unused 50-caliber shells (live rounds) was recovered and transferred to the Merced Police Department. B806 (Parcel G5) is subleased to Evans Security Company, which uses limited small arms and ammunition.

5.17 AIR PERMITS

There are no known industrial stationary air pollution generating systems in operation within the County Parcels. The County of Merced will be responsible for obtaining air permits for any generators or industrial operations. Mobile air permits are required for commercial aircraft.

5.18 BIOLOGICAL RESOURCES

No areas within the County Parcels are classified as wetlands or other sensitive habitats. No threatened and endangered species have been identified within the County Parcels.

6 REGULATORY COORDINATION

The regional Water Quality Control Board (RWQCB), Department of Toxic Substances Control (DTSC) and the EPA were notified on 12 February 2003 of the initiation of the FOST working draft documents. Consolidated draft final documents were provided on 10 May 2004 for formal review and comment.

After reviewing and discussing regulatory FOST and SEBS comments (Attachment 4) with the applicable regulatory agency (RWQCB did not have any comments) certain comments were not incorporated or addressed as requested by the regulatory agencies. The Air Force's response to these comments is provided in Attachment 5. Identification of unresolved regulatory comments (specifically LBP, County of Merced tenant property use issues, and petroleum issues) are provided in Attachment 6. In addition, the EPA provided a FOST concurrence letter, dated June 18, 2004, which is included in attachment 4 (no Air Force response is necessary for aforementioned letter).

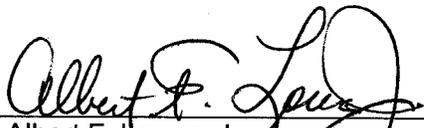
The Air Force made the FOST available for public comment from 18 May 2004 through 16 June 2004. Comments were received from DTSC (similar and in addition to those received and presented in attachment 4). These DTSC comments (and Air Force response) are presented in attachment 7. No other comments were received during this period.

7 FINDING OF SUITABILITY TO TRANSFER

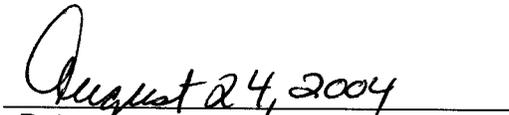
The deed proposal has been adequately assessed and evaluated for (a) environmental hazards, (b) environmental impacts anticipated for future use of the property, and (c) adequate notice of disclosure resources. The future use of this property does not present a current or future risk to human health and the environment, subject to inclusion and compliance with the appropriate deed covenants as addressed above. The following covenant CERCLA language will be included in the Deed:

- 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 have been taken before the date of transfer.
- CERCLA 120(h)(3)(A)(ii)(II) warranting that all remedial action under CERCLA found to 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. The property, therefore, is suitable for transfer.



Albert F. Lowas, Jr.
Director
Air Force Real Property Agency



Date

Attachments:

1. Environmental Factors Considered
2. Notice of Hazardous Substances Stored/Disposed/Released
3. Property Maps (Figures 1 through 8)
4. Regulatory FOST and SBEBS Comments
5. Air Force Responses to Regulatory Comments
6. Unresolved Regulatory Comments
7. Public Notice Comments Received



DEPARTMENT OF THE AIR FORCE
AIR FORCE REAL PROPERTY AGENCY

28 June 2004

MEMORANDUM FOR RECORD

FROM: AFRPA/DD Castle
4500 North Hospital Road
Atwater, CA 95301

SUBJECT: Castle AFB, Final Supplement to the Basewide Environmental Baseline Survey (SBEBS), June 2004

1. Castle AFB personnel conducted visual site inspections (VSIs) from 17 May 2004 through 11 June 2004 for the purpose of updating the original VSIs (which were performed from October through December 2003; minor VSI update in March 2004) supporting the subject SBEBS. These updated VSIs utilized similar techniques, procedures and processes outlined in the SBEBS. The updated VSIs provided the following conclusion:
 - No significant environmental condition changes from those described in the subject SBEBS were noted.
2. If you have any questions, please call me at (916) 643-6420.

A handwritten signature in black ink, appearing to read "Gregory C. Gangnuss".

Gregory C. Gangnuss
AFRPA/DD-Castle BEC

Attachment 1
Environmental Factors Considered

**County Parcels
Environmental Factors Considered**

Environmental Factors	Deed Restriction or Notification Required?	
	No	Yes
<i>Environmental Restoration, Hazardous Substances, Petroleum</i>		
Hazardous Substances (Notification)		X
Installation Restoration Program (IRP)		X
Petroleum Products and Derivatives		X
Oil/Water Separators (OWSs)		X
Unexploded Ordnance	X	
Radioactive & Mixed Wastes	X	
Storage Tanks (USTs/ASTs)		X
<i>Disclosure Factors/Resources</i>		
Asbestos		X
Drinking Water Quality	X	
Indoor Air Quality	X	
Lead-Based Paint (Housing)	NA	
Lead-Based Paint (Facilities other than Housing)		X
PCBs		X
Radon	X	
<i>Other Factors</i>		
Air Conformity/Air Permits	X	
Energy (Utilities)	X	
Floodplains		X
Historic Property (Archeological/Native American, Paleontological)	X	
Outdoor Air Quality	X	
Prime/Unique Farmlands	X	
Sanitary Sewer Systems (Wastewater)		X
Sensitive Habitat	X	
Septic Tanks (Wastewater)		X
Solid Waste	X	
Storm Water Waste Discharge Permit		X
Threatened and Endangered Species	X	
Wetlands	X	

Attachment 2

Notice of Hazardous Substances Stored/Disposed/Released

NOTICE OF HAZARDOUS SUBSTANCES STORED/DISPOSED/RELEASED

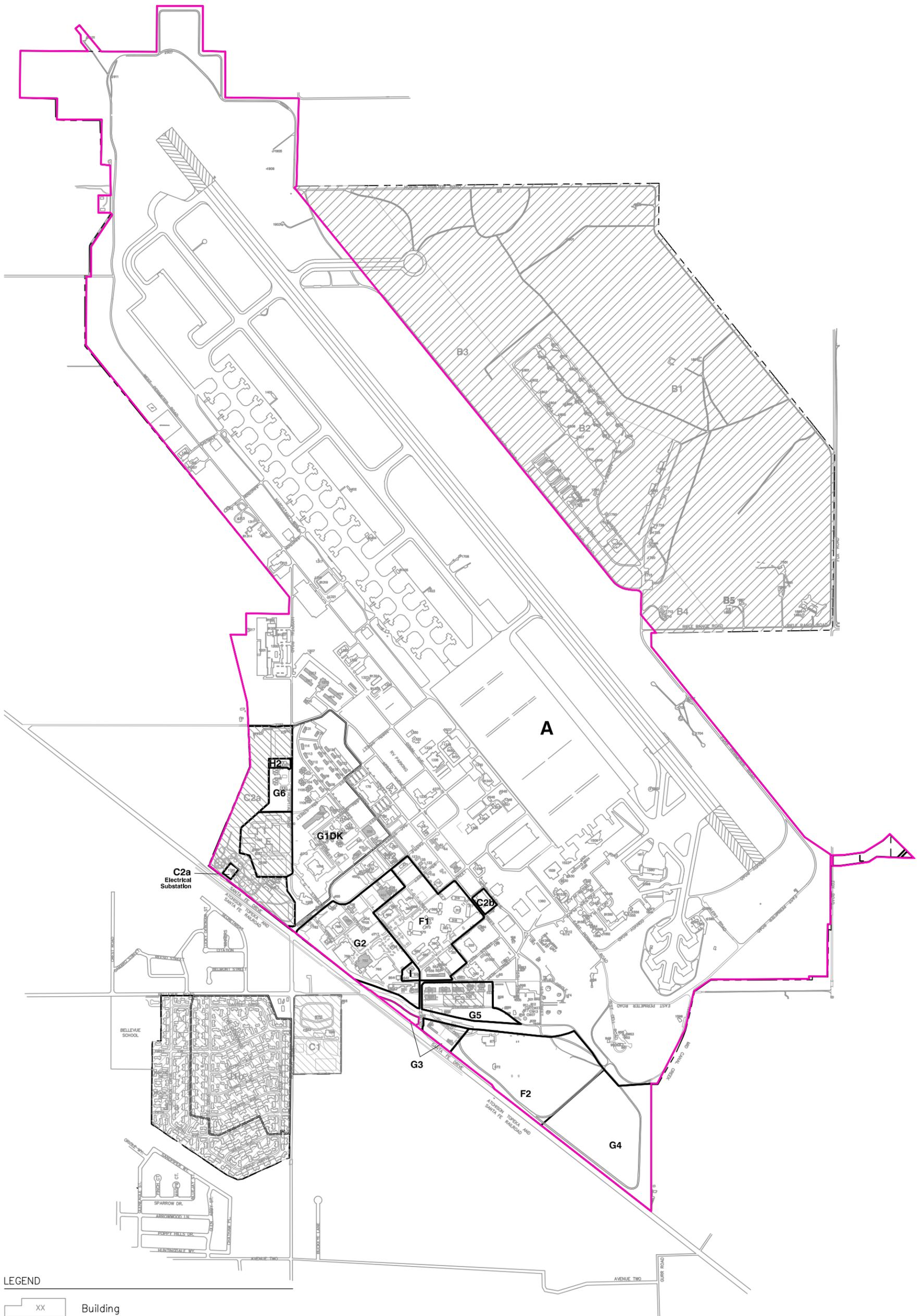
Notice is hereby given that the information provided below from the SBEBs contains a notice of hazardous substances that have been stored for one year or more, disposed of or released on the Castle Airport County Parcels at Castle Air Force Base, and the dates that such storage/disposal/release took place. The information contained in this notice is required under the authority of regulations promulgated under section 120(h) of the Comprehensive Environmental Response, Liability, and Compensation Act (CERCLA or "Superfund") 42 U.S.C. section 9620(h).

Hazardous Substances Stored/Disposed/Released Castle Airport County Parcels					
Substance Disposed	Regulatory Synonym(s)	CAS Registry Number	Quantity	Dates Disposed	Remarks
1. Removal Actions – Contaminated Soil					
PCBs	Aroclor 1260	--	7.8 kg	Release prior to 1981. Excavated from PCB-5, 2002.	Details in Removal Action and Investigation Summary for PCB Sites 4, 5, and 6, 2002
Polychlorinated Aromatic Hydrocarbons (PAHs)	benzo(a)pyrene	50-32-8	0.090 kg	Unknown release date. Excavated from B1344, 2000.	Details in Closure Report for CERCLA and Petroleum Hydrocarbon-Contaminated Excavation Sites, 2000
Lead		7439-92-1	150 kg	Unknown release date. Excavated from DA-3, 2000.	Details in Action Memorandum for CERCLA Sites ETC-2, ETC-8, DA-3 and Building 1344 at Castle Airport, 2000.
PCBs	Aroclor 1260		0.12 kg	PCB release in May 1983. Excavated from PCB-9, 1998.	Details in PCB-9 Closure Report, 1998
PCBs	Aroclor 1260		0.017 kg	Release from DRMO yard in 1950s. Excavated from B871, 1996.	Details in Technical Report, Removal Action at B871, 1996.
Pesticides	4-4-DDE	72-55-9	0.020 kg		
PAHs	benzo(a)pyrene	50-32-8	3.4 kg	Release data unknown. Excavated from ETC-2, 2000.	Details in Action Memorandum for CERCLA Sites ETC-2, ETC-8, DA-3 and Building 1344 at Castle Airport, 2000.
<i>Radioactive Sources:</i>					
Medical Pellet (2" x 1.5" x 0.5")	RA-226	7440-14-4	10,500 pCi/g	Release prior to 1960. Excavated from LF-1, 1999.	Details in Landfill 1, Landfill 3 and Firing Range Closure Report, 2000.
	U-238	7440-61-1	12,500 pCi/g		
Metal fragment	gamma radiation	--	9,540,000 cpm		
Metal fragment	gamma radiation	--	18,700,000 cpm		

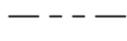
Hazardous Substances Stored/Disposed/Released Castle Airport County Parcels					
Substance Disposed	Regulatory Synonym(s)	CAS Registry Number	Quantity	Dates Disposed	Remarks
2. Groundwater Plume					
TCE	trichloroethene	79-01-06	2,500 lbs	Release prior to 1978. (LTGSP 2003 Annual Report, 2004)	Total mass estimate for Main Base Plume
TCE	trichloroethene	79-01-06	500 lbs		Remaining mass estimate for Main Base Plume (Q4/03)
3. Current Potentially Hazardous Substances Identified in VSI Reports (October-December 2003; May-June 2004)					
Paints/ Solvents/ Unknown Wastes	--	--	--	--	63 drums (contents unknown) and hundreds of 5-gallon buckets (paint) stored in B1323 yard.
	--	--	--	--	7 drums (contents unknown) stored at B1531.
	--	--	--	--	7 5-gallon cans (paint) stored at B175.
	--	--	--	--	1 drum containing white granular solid stored at B1404.
	--	--	--	--	Undetermined number of drums and/or 5-gallon buckets (contents unknown) stored at B175, B325, B340, B1253, B1319, B1324, B1350, B1356, B1404, B1509, B1529, B1531 and B1561.
Other Hazardous Substances	--	--	--	--	Locked hazardous materials cabinet at B1526.
	--	--	--	--	Gas cylinders stored at B1350.
	--	--	--	--	Used motor oil and car batteries stored at B1405 and B1532.
Note					
The quantities and concentrations of any suspected hazardous substances in item 3 are unknown. The listed IRP sites are located in Parcel A, except B871 and ETC-2 (Parcel F2); PCB-5 (Parcel G2); DA-3 (Parcel G3); and LF-1 (Parcel G4).					

All hazardous substances listed in the BEBS were removed by the Defense Reutilization and Marketing Office (DRMO) in 1995. Except for potentially hazardous materials currently stored at leased property and identified in the VSI reports, all known hazardous substances have been removed and properly disposed of. The County of Merced is responsible for removal, testing and treatment of any hazardous substances at the leased property.

Attachment 3
Property Maps (Figures 1 through 8)



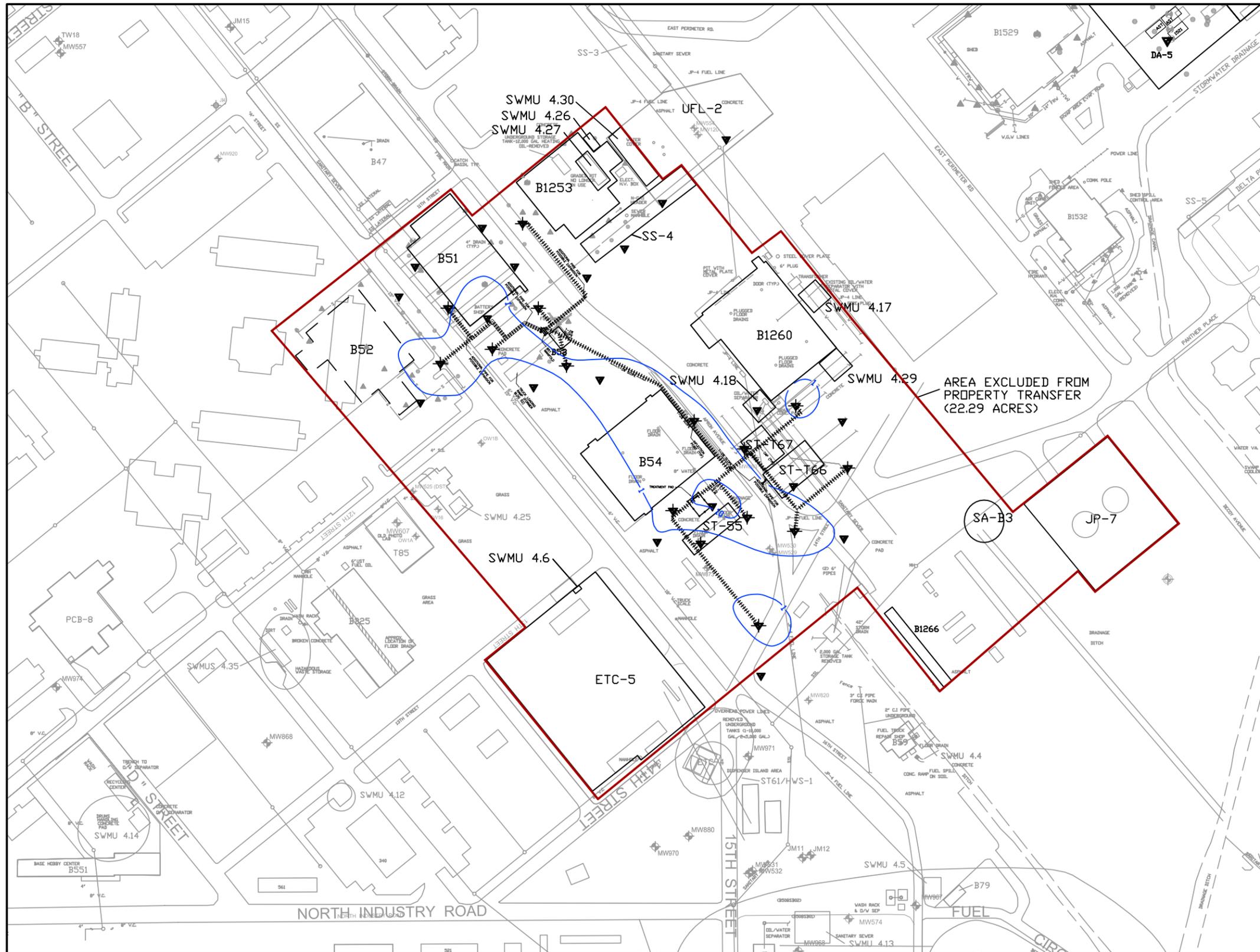
LEGEND

-  Building
-  Demolished Building
-  Castle Airport Property Line
-  Roads
-  Parcel Boundary and Designation-Parcel in County Parcels
-  County Parcels Boundary
-  Parcel Boundary and Designation-Previously Transferred Parcels
-  Parcel Boundary and Designation-Parcels Excluded from County Parcels

300 0 300 600 900 1200 1500
 Scale In Feet
 1:18000



**Property Map, Castle Airport
 County Parcels**
 County Parcels FOST
 Castle Airport



B51/B54 GROUP SITE SUMMARY

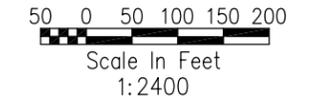
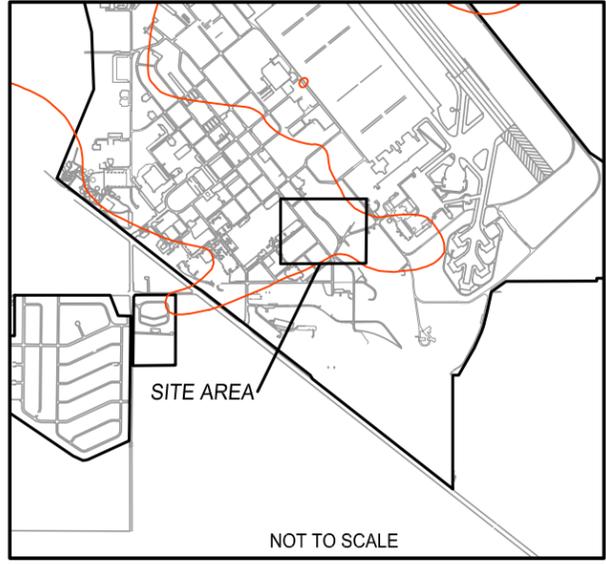
SITE: B51/B54 Group **GRID:** R11/R12
LINKED SITES: B51 (B52, B53, B1253 and SWMUs 4.26, 4.27 and 4.30); B54 (B1260, B1266, JP-7, ST-55, ST-T66, ST-T67, ETC-5, SA-B3 and SWMUs 4.6, 4.17, 4.18 and 4.29); and SS-4
DESCRIPTION: Aircraft maintenance facilities. Major site activities/features included engine cleaning (degreasing) and electroplating, corrosion control, paint stripping, solvent distillation, a washrack, a 90-day hazardous waste accumulation pad and a vehicle maintenance and parking area.

STATUS: Integrated SVE system installed and operating as a CERCLA removal action. System startup on 8 August 2001. Portion of system addressing VOC contamination at the B51 Group site (and the SS-4 site) consists of six vapor extraction wells and associated piping and 11 vapor monitoring wells. Portion of system addressing VOC contamination at the B54 Group site consists of nine vapor extraction wells and associated piping and seven vapor monitoring wells. The treatment unit (vapor-phase GAC) is located within the B54 Group site.

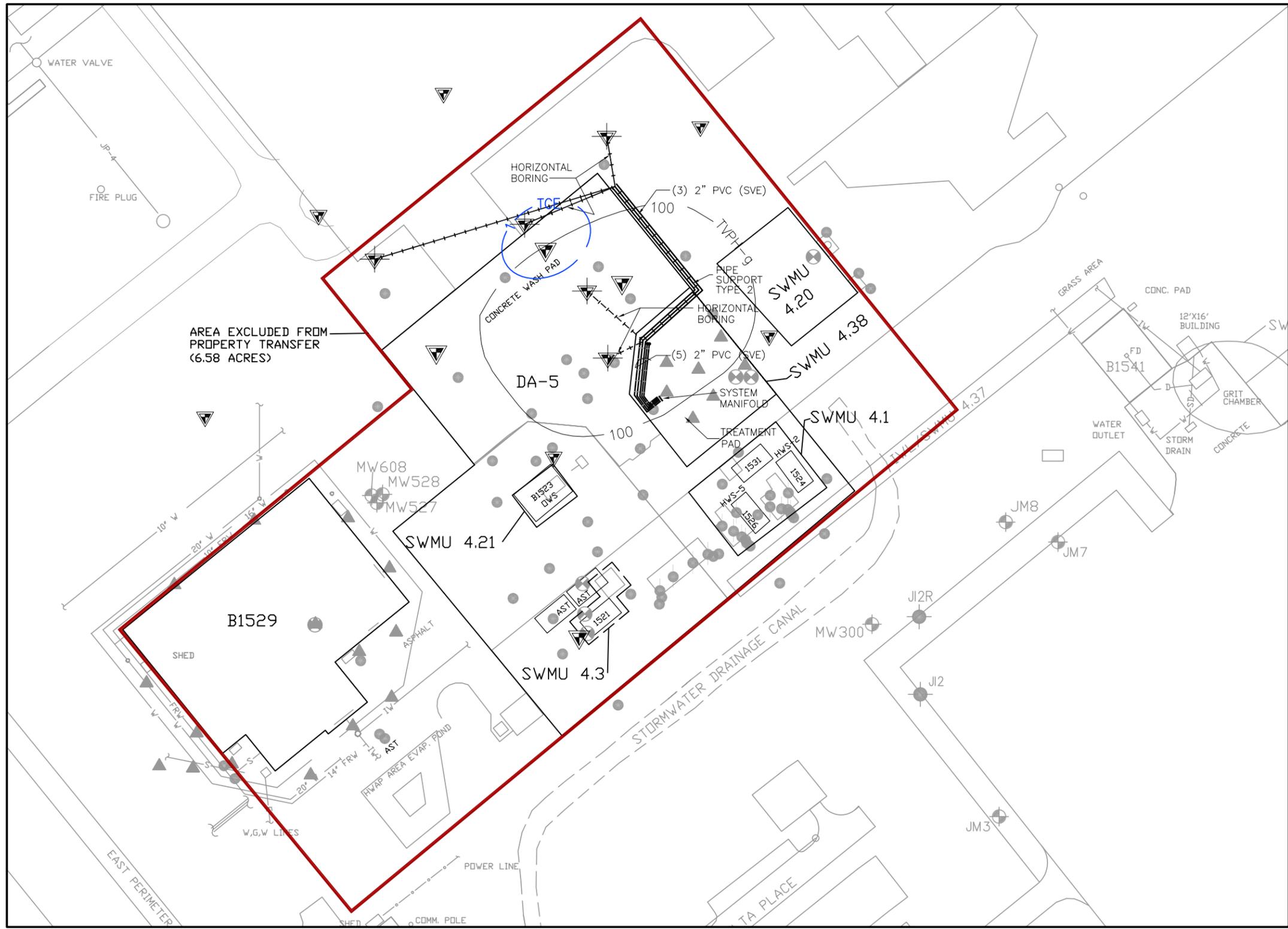
NOTE: Soil and Soil Gas Sampling Locations Shown are SCOU RI and SCOU Data Gap Investigation Only.

SVE SYSTEM Source: MWH, 2002a. *Draft Final Operation and Maintenance Manual, Building 51 Group and Building 54 Group Soil Vapor Extraction System.* Prepared for AFCEE, Brooks AFB, Texas. April.

SITE LOCATION WITH RESPECT TO THE Q2/2003 COMBINED TCE PLUME



LEGEND							
	Building		Monitoring Well		Nested Vapor Extraction Well		TCE Isoconcentration Contour in Soil Gas (ppmv) as of Mid-2003
	Site Boundary		Soil Boring		Nested Vapor Monitoring Well		
	Background Feature		Soil Gas Boring		Demolished Building		
	Injection Well		Hand Auger		SVE Piping		



DA-5/SWMU 4.3/SWMU 4.21 SITES SUMMARY

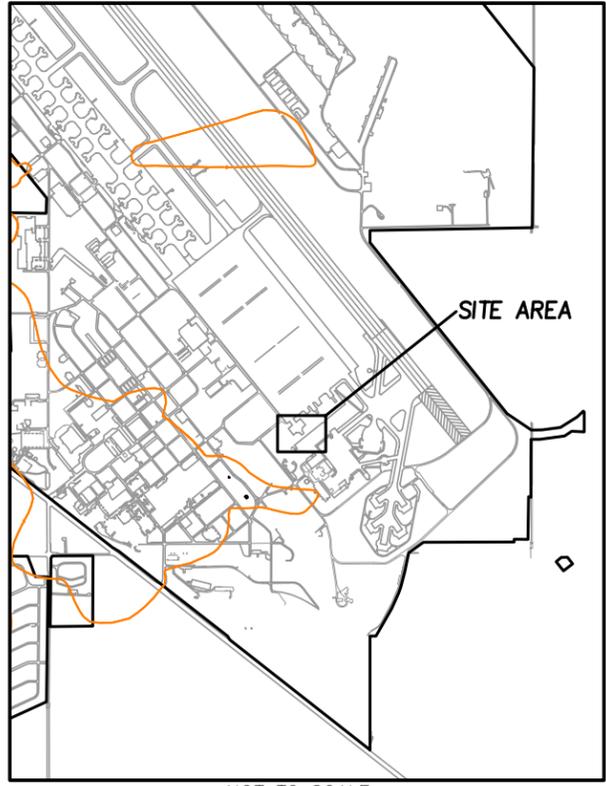
SITE: DA-5/SWMU 4.3/SWMU 4.21 **GRID:** Q13
LINKED SITES: B1529, and SWMUs 4.1, 4.20, 4.21, 4.3 and 4.38
DESCRIPTION: System of drainage features and pipelines adjacent to the main aircraft washrack (B1529). Associated facilities include two hazardous waste storage areas, two oil/water separators, an equipment storage building and a catchment basin.

STATUS: SVE system installed and operating as a CERCLA removal action. System startup on 8 October 2001. The system consists of five vapor extraction wells and piping connecting these wells to a vapor-phase GAC treatment unit. There are nine vapor monitoring wells.

NOTE: Soil and Soil Gas Sampling Locations Shown are SCOU RI and SCOU Data Gap Investigation Only.

SVE System Source: MWA, 2002c. *Draft Final Operation and Maintenance Manual, Building 1762, Building 1350 and Discharge Area 5 Soil Vapor Extraction System.* Prepared for AFCEE, Brooks AFB, Texas. April.

SITE LOCATION WITH RESPECT TO THE Q2/2003 COMBINED TCE PLUME



LEGEND

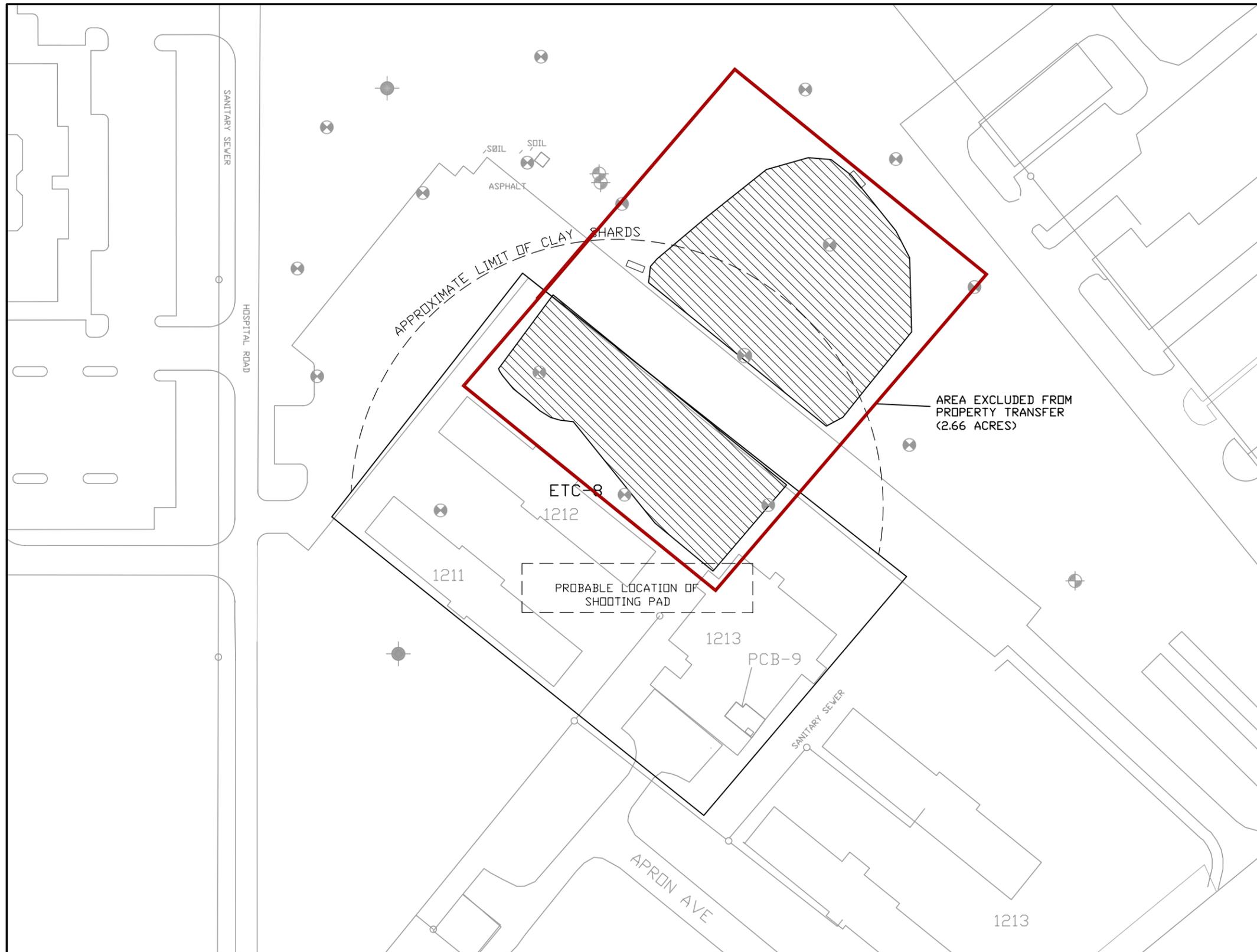
	Building		Monitoring Well		Soil Boring		100 TVPH-g Isoconcentration Contour in Soil Gas (ppmv) as of Mid-2003
	Site Boundary		Injection Well		Soil Gas Boring		TCE Isoconcentration Contour in Soil Gas (ppmv) as of Mid-2003
	Site Feature		Surface Scrape		Nested Vapor Extraction Well (with estimated Radius of Influence)		
	Background Feature		Hand Auger		Nested Vapor Monitoring Well		
	Drainage Feature		Removed Feature		SVE Piping		

Scale In Feet 1:1200

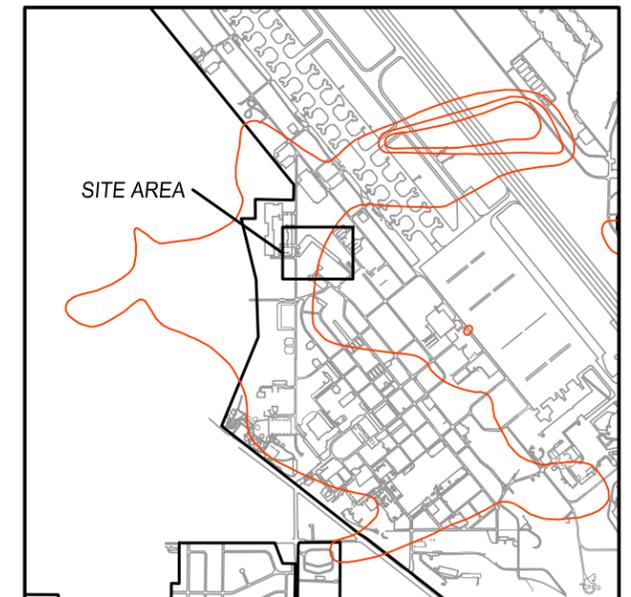
DA-5/SWMU 4.3/SWMU 4.21 Sites Map
 County Parcels FOST
 Castle Airport

ETC-8 SITE SUMMARY

SITE: ETC-8 **GRID:** N9
LINKED SITES: None
DESCRIPTION: Former skeet shooting range. Clay pigeon fragments and lead shot distributed in a fan-shaped pattern in front of the former shooting pad.
STATUS: Removal action completed in August 2000. Approximately 2,200 cubic yards of PAH-contaminated soil excavated and transported to LF-4 for disposal. Closure report for excavation and disposal: *Closure Report for CERCLA and Petroleum Hydrocarbon-Contaminated Excavation Sites* (Jacobs, 2000d). Excavation and off-site disposal of PAH-impacted soil beneath road planned for 2004.



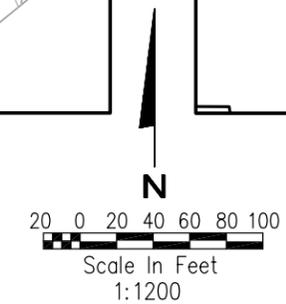
SITE LOCATION WITH RESPECT TO THE Q2/2003 COMBINED TCE PLUME



LEGEND

- xx Building
- Site Boundary
- Site Feature
- Background Feature
- Monitoring Well
- Injection Well
- Hand Auger
- Approximate Extent of PAH-Contaminated Soil Excavated in 2000 (to 1-2 ft. bgs)
Source: Jacobs, 2000c.

NOTE: Soil and Soil Gas Sampling Locations Shown are SCOU RI and SCOU Data Gap Investigation Only.



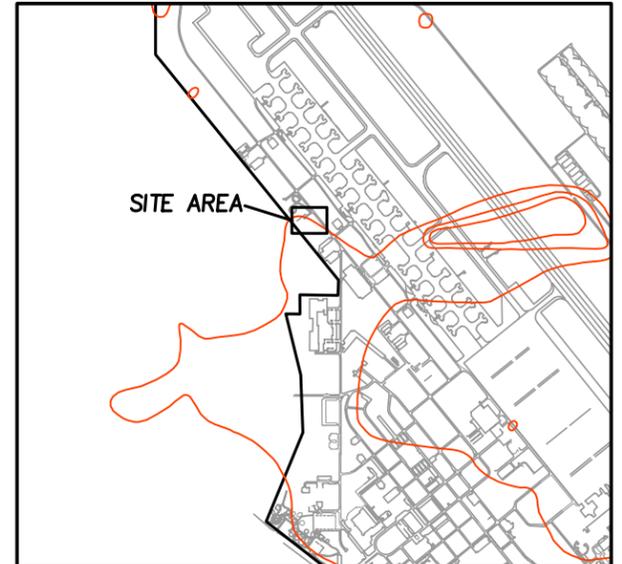
ETC-8 Site Map
 County Parcels FOST
 Castle Airport

Figure 4



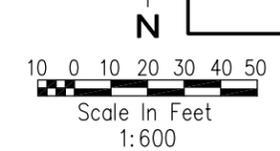
DA-4/B1314 SITE SUMMARY			
SITE: DA-4		GRID: K8	
LINKED SITES: B1314			
DESCRIPTION: Liquid oxygen manufacturing and storage facility from the early 1950s until the mid 1960s. Solvents, including TCE, were used to clean filters and then discharged to a shallow trench and French drain system.			
CONTAMINANTS OF CONCERN			
BHHRA		WQSA	
		TCE	
PRE-REMEDY HH:	CANCER RISK	NON-CANCER HAZARD	
SOIL:	4.9E-08	0.003	
GW:	1.8E-05	0.7	
COMBINED:	1.8E-05	0.7	
ECOLOGICAL HABITAT: Marginal			
SELECTED REMEDY: SVE			SCOU ROD: 2
POST-REMEDY HH:	CANCER RISK	NON-CANCER HAZARD	
SOIL:	4.9E-08	0.003	
GW:	5.7E-07	0.02	
COMBINED:	6.2E-07	0.02	
DECISION PROCESS COMMENTS: SCOU FS preferred alternative and the selected remedy (SCOU ROD 2) is SVE.			
STATUS: SVE system installed and operated as a CERCLA removal action from August 1996 through January 1997. The system consists of four vapor extraction wells and piping connecting these wells to a vapor-phase GAC treatment unit. There are eight vapor monitoring wells, two of which were intermittently connected to the system. During 1996-1997, the system removed approximately 300 pounds of VOCs from the vadose zone. The BCT subsequently decided that closure was not warranted and that SVE operation should continue. The existing system was operated from November 2001 through May 2002. Former B1314 was removed. Excavation of residual soil contamination is planned in 2004.			

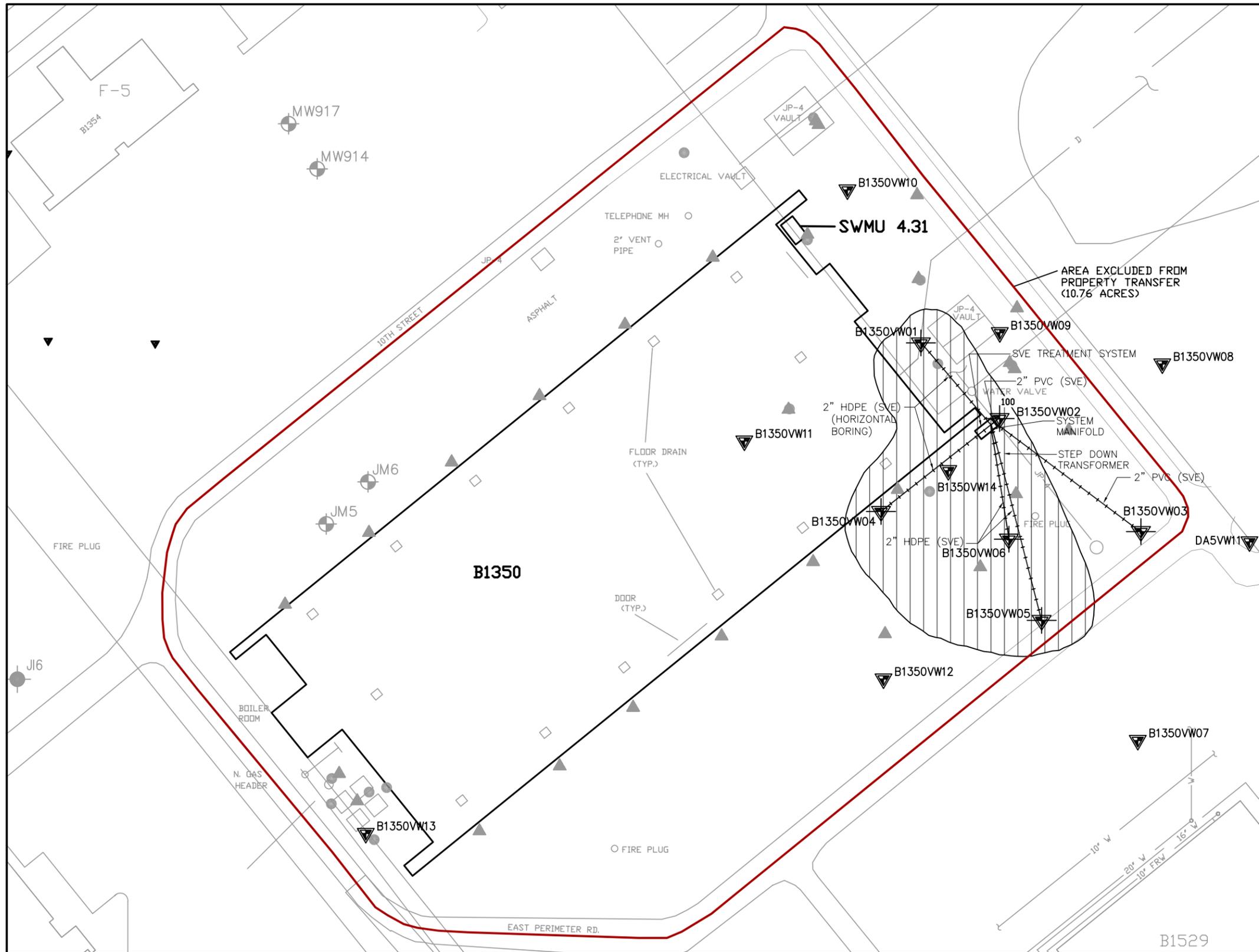
SITE LOCATION WITH RESPECT TO THE Q2/2003 SHALLOW HSZ TCE PLUME



LEGEND

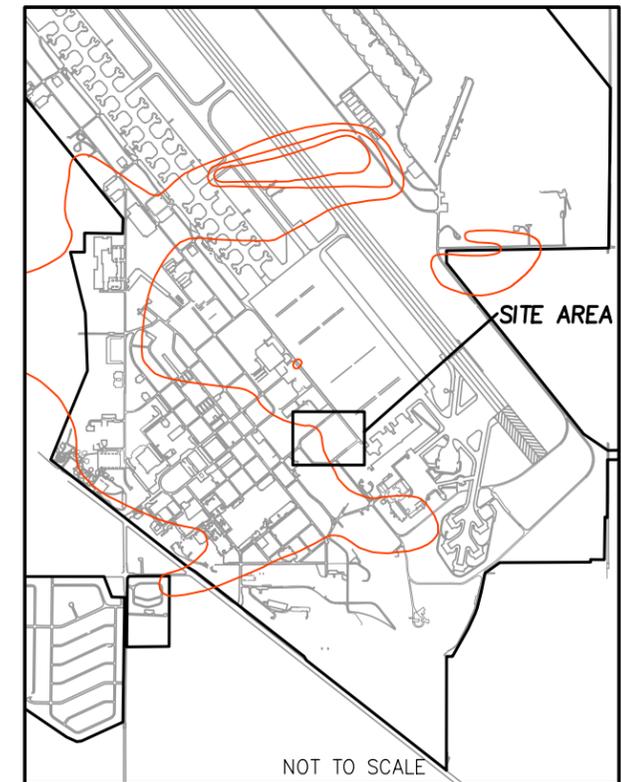
	Building		Soil Boring		Single Vapor Extraction Well		Approximate Extent of TCE in Soil Gas >50 or 100 µg/L Prior to Remediation (20 ft. bgs)	NOTE: Soil and Soil Gas Sampling Locations Shown are SCOU RI and SCOU Data Gap Investigation Only.
	Site Boundary		Monitoring Well		Nested Vapor Monitoring Well		SVE SYSTEM	
	Base Boundary		Extraction Well		Nested Vapor Extraction Well		Source: Jacobs, 1998, DA-4 Closure Report. Prepared for AFCEE, Brooks AFB, Texas. April.	
	Background Feature		Soil Gas Boring					
	SVE Piping							





B1350 SITE SUMMARY	
SITE: B1350	GRID: Q12
LINKED SITES: SWMU 4.31	
DESCRIPTION: Aircraft maintenance facility. Major site activities included repair and overhaul of hydraulic and electrical systems and other general aircraft maintenance.	
STATUS: SVE system installed and operating as a CERCLA removal action. System startup on 9 October 2001. The system consists of six vapor extraction wells and piping connecting these wells to a vapor-phase GAC treatment unit. There are eight vapor monitoring wells. To date (12 June 2002) the system has removed approximately 122 pounds of VOCs from the vadose zone. A rebound study is currently in progress (April 2004).	

SITE LOCATION WITH RESPECT TO THE Q2/2003 SHALLOW HSZ TCE PLUME



LEGEND

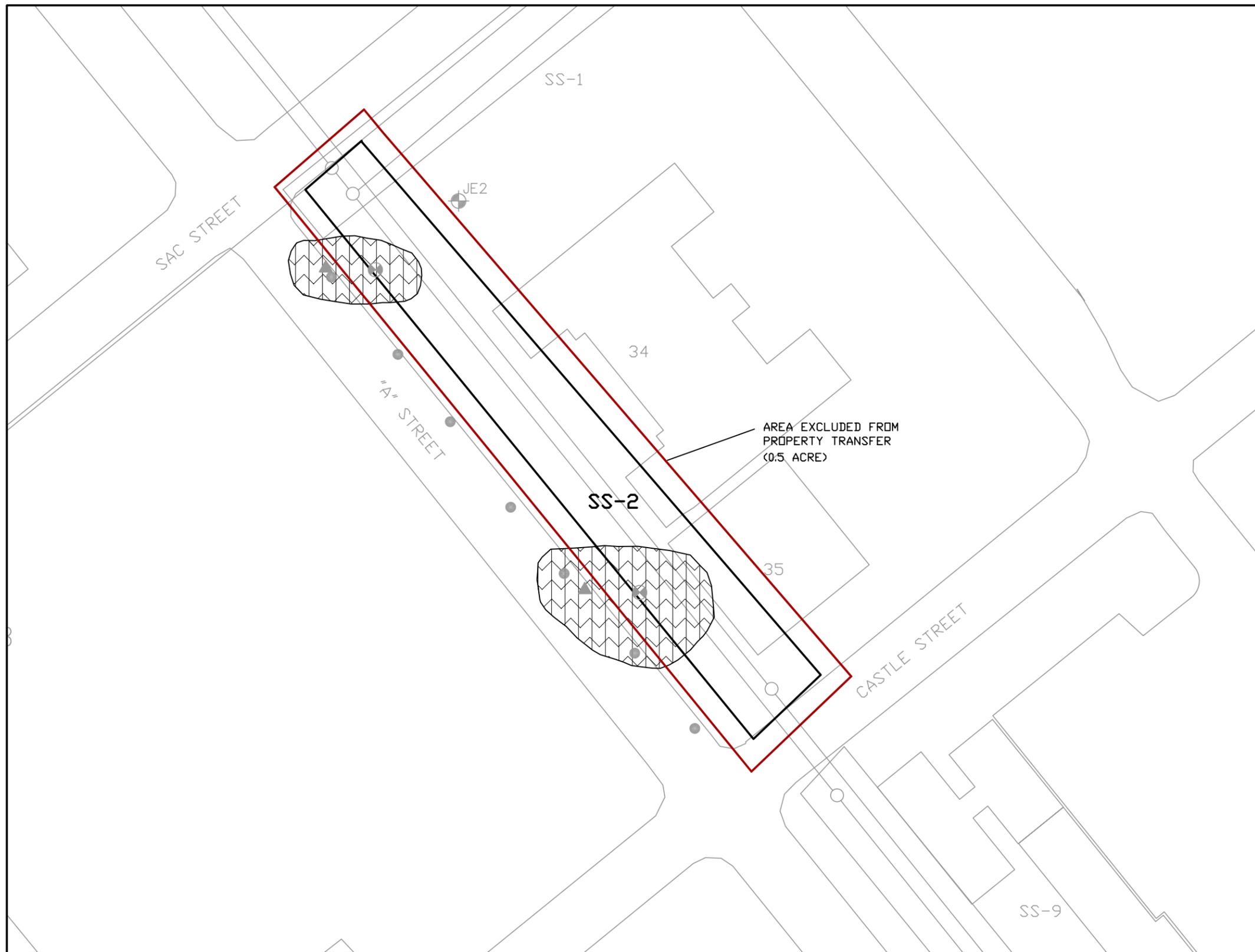
	Building		Monitoring Well		Nested Vapor Extraction Well		SVE SYSTEM
	Site Boundary		Injection Well		Nested Vapor Monitoring Well		
	Site Feature		Soil Boring		SVE Piping		
	Background Feature		Soil Gas Boring				

TCE in Soil Gas >100 µg/L Prior to Remediation (25-45 ft. bgs)
 Source: Earth Tech. 2000. *Soil Vapor Extraction Decision Study, SCOU Data Report*. Prepared for AFCEE, Brooks AFB, Texas. November.
 Source: MWH, 2002b. *Draft Final Operation and Maintenance Manual, Building 1762, Building 1350 and Discharge Area 5 Soil Vapor Extraction System*. Prepared for AFCEE, Brooks AFB, Texas. April.

NOTE: Soil and Soil Gas Sampling Locations Shown are SCOU RI and SCOU Data Gap Investigation Only.

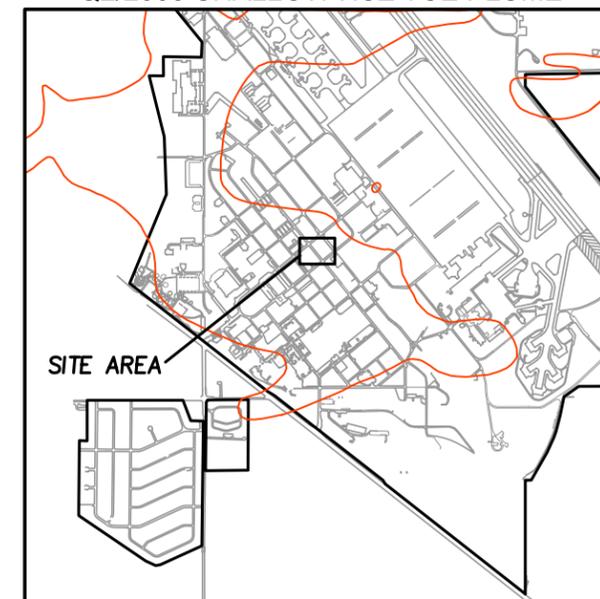


B1350 Site Map
 County Parcels FOST
 Castle Airport



SS-2 SITE SUMMARY			
SITE: SS-2		GRID: R10	
LINKED SITES: None			
DESCRIPTION: Sanitary sewer segment near the intersection of "A" and "SAC" Streets. The sewer system was installed in 1941 and initially received industrial wastes from sumps, floor drains, washracks and oil/water separators. The system currently handles only sanitary sewage.			
CONTAMINANTS OF CONCERN			
BHHRA		WQSA	
		TCE (<WQSA)	
PRE-REMEDY HH:	CANCER RISK	NON-CANCER HAZARD	
SOIL:	1E-07	0.003	
GW:	6E-06	0.9	
COMBINED:	6E-06	0.9	
ECOLOGICAL HABITAT: None			
SELECTED REMEDY: SVE			SCOU ROD: 2
POST-REMEDY HH:	CANCER RISK	NON-CANCER HAZARD	
SOIL:	1E-07	0.003	
GW:	2E-06	0.06	
COMBINED:	2E-06	0.06	
DECISION PROCESS COMMENTS: SCOU FS preferred alternative was NFA. However, based on VOCs and petroleum hydrocarbons detected during data gap sampling, this was modified (post-FS decision) to SVE.			
STATUS: Site evaluated as part of SVE Decision Study (Earth Tech, 2000). SVE treatment system operated from August 2002 until May 2003. The closure report titled "Soil Vapor Extraction Decision Study, Sewer Segment 2 Closure Report" was submitted in 2003, pending regulatory approval.			

SITE LOCATION WITH RESPECT TO THE Q2/2003 SHALLOW HSZ TCE PLUME

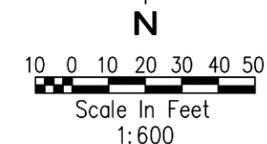


NOT TO SCALE

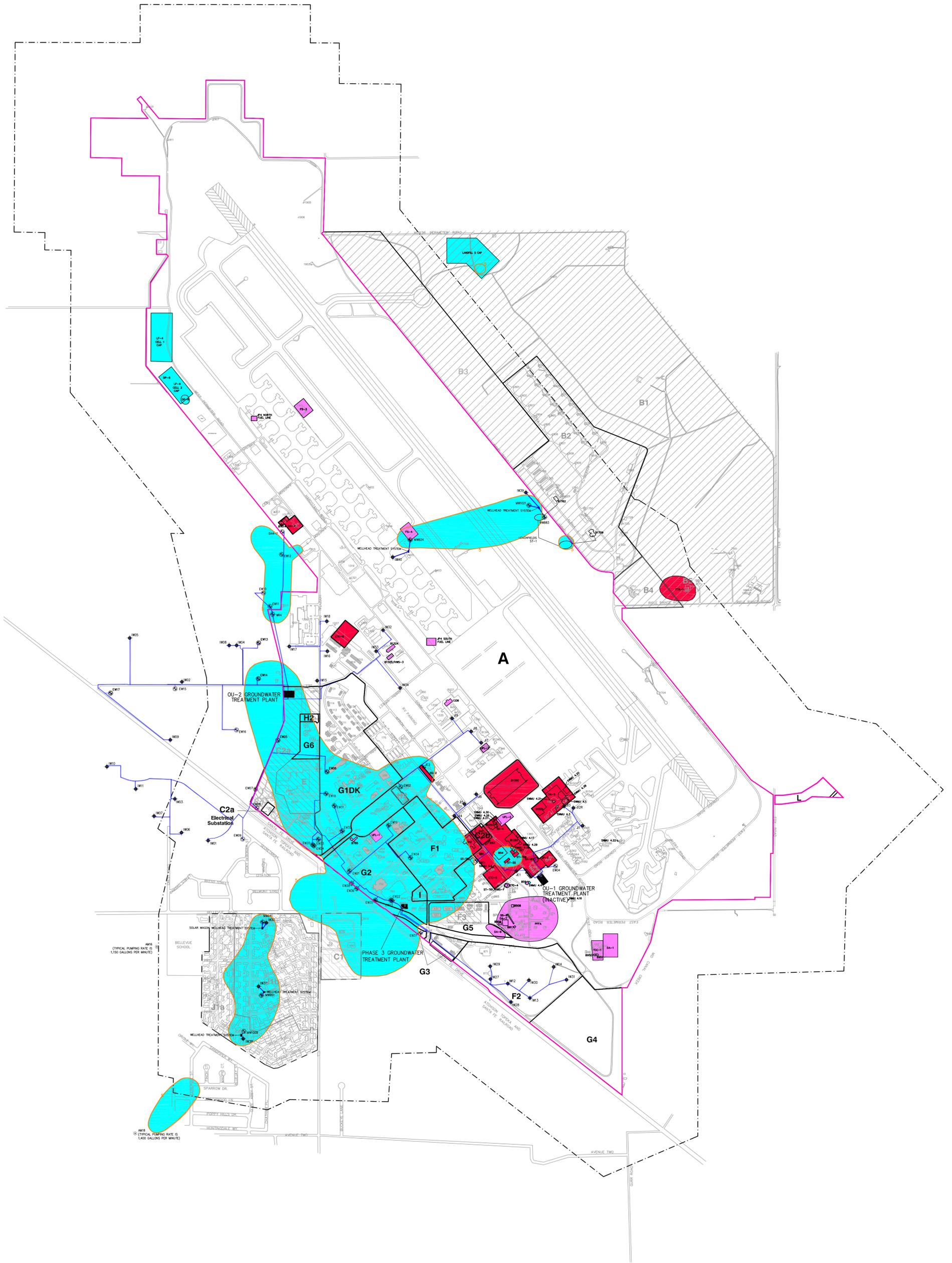
LEGEND

- Building
- Site Boundary
- Background Feature
- Extraction Well
- Soil Boring
- Hand Auger
- Soil Gas Boring
- Area of Apparent VOC and Petroleum Hydrocarbon Contamination in Soil (to 15 ft. bgs) and Soil Gas (to 60 ft bgs) Prior to Remediation
Sources: Earth Tech, 2000; Jacobs, 1999a.

NOTE: Soil and Soil Gas Sampling Locations Shown are SCOU RI and SCOU Data Gap Investigation Only.



SS-2 Site Map
County Parcels FOST
Castle Airport



LEGEND

	Building		Extraction Well
	Demolished Building		Injection Well
	Castle Airport Property Line		Municipal Well
	Roads		MCL Contour for TCE (Q4/03 all HSZs)
	Parcel Boundary and Designation		Extraction/Injection Conveyance System
	County Parcels Boundary		Adjacent 0.25 Mile Zone
	Parcel Boundary and Designation-Previously Transferred Parcels		
	Parcel Boundary and Designation-Parcels Excluded from County Parcels		
	PHO/UST Corrective Action Sites		
	Remedial Action in Progress and OPS Sites (Including Groundwater TCE Plumes)		
	Excluded Or Adjacent Remedial Action Sites		

Existing Buildings Not On Figure

Building	Parcel
1393	A
4106	A
B324	A
B860	F2
B681	C1

Demolished Buildings Not On Figure

Building	Parcel	Building	Parcel
121	A	B525	G5
290	A	B527	G5
443	G1DK	B682	C1
910	A	B683	C1
1203	A	B687	C1
1567	A	B915	A
1576	A	B1204	A
1701	A	B1208	A
4204	-	B1718	B1
B415	G2	B1868	B2

Sites:

B	Building	LG	Lagoon
DA	Discharge Area	PCB	Polychlorinated Biphenyls
DP	Disposal Pit	PFFA	Petroleum Fuel Farm Area
ETC	Earth Technology Corporation	SA	Storage Area
F	Fuel Spill	SDS	Storm Drain System
FS	Aircraft Maintenance Hangar	SS	Sanitary Sewer
FTA	Fire Training Area	ST	Structure
H	Gasoline Service Station	STA	Stain
HS	Hazardous Waste Storage Area	SWMU	Solid Waste Management Unit
IWL	Industrial Waste Line	TCC	Test Control Center
JP	Jet Fuel	UFL	Underground Fuel Leak
LF	Landfill		

Notes:

ECC	Environmental Condition Category
EW	Extraction Well
HSZ	Hydrostratigraphic Zone
IW	Injection Well
JE	Jacobs Extraction Well
JL	Jacobs Injection Well
MCL	Maximum Contaminant Level
MW	Monitoring Well
NFA	No Further Action
OPS	Operating Properly and Successfully
OU	Operable Unit
PHO	Petroleum Hydrocarbon Only
SVE	Soil Vapor Extraction
TCE	Trichloroethene
UST	Underground Storage Tank



Active Remediation and PHO/UST Sites
County Parcels FOST
Castle Airport

Attachment 4
Regulatory Comments



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

JUN 18 2004

Mr. Greg Gangnuss
Castle BEC
AFRPA/DB Castle
4500 North Hospital
Atwater, CA 95301-4900

**Subject: Castle Air Force Base – Draft Final Finding of Suitability to Transfer of (FOST)
County of Merced Parcels A, C2a, F1, F2, G1DK, G2, G3, G4, G5, G6, H2, I, J1b,
and L dated May 12, 2004**

Dear Mr. Gangnuss:

The U.S. Environmental Protection Agency, Region IX (EPA) has reviewed the response to comments (RTC) of the above referenced Finding of Suitability to Transfer (FOST) dated October 1, 2003, for the property at the former Castle Air Force Base, California, identified as Parcels A, C2a, F1, F2, G1DK, G2, G3, G4, G5, G6, H2, I, J1b, and L. The Air Force intends to transfer the buildings and structures on approximately 1,836 acres of developed and undeveloped land to Merced County for a variety of uses including aviation, industrial and commercial development with the exception of the following Installation Restoration Program (IRP) Sites: ETC-8, Solid Waste Management Units 4.3 & 4.21, Building 51/54 Group, DA-4, DA-5, Building 1314, Building 1350 and Sewer Segment 2. These referenced IRP sites will be excluded from the transfer as remediation actions have not been completed at these sites.

In addition, as indicated in EPA's March 4, 2004 concurrence letter on Castle Air Force Base's Final Operating Properly and Successfully Report, EPA's concurrence is contingent upon the Air Force's agreement not to transfer the deed for Parcel A where Landfill 4 is located until the Record of Decision for Landfill 4 is finalized. The Air Force reiterates this agreement in the Draft Final FOST.

The former Castle Air Force Base is an installation listed on the National Priorities List. All parcels identified within the FOST have been cleaned up under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §9601-9675 except the sites referenced in the above paragraph. The Air Force intends to transfer those parcels identified in the FOST under CERCLA Section 120(h)(3).

When entering into a deed for transfer under Section 120(h)(3), the Air Force is required to include in such deed a covenant warranting that all remedial action necessary to protect human health and the environment with respect to any hazardous substance remaining on the property has been taken before the date of transfer, and that any additional remedial action found to be necessary after the date of the transfer shall be conducted by the United States.

EPA has reviewed the Draft FOST dated October 1, 2003; the Air Force's Responses to Comments on the Draft FOST dated April 12, 2004, the Basewide Environmental Baseline Survey (BEBS) dated December 2003; the Supplemental BEBS dated October 1, 2003; Final Demonstration of Remedial Actions Operating Properly and Successfully Evaluation Report dated February 9, 2004, and other relevant documents (collectively, "Documentation").

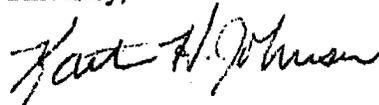
Without independent investigation or verification of certain information contained in the Documentation, the undersigned concurs, to the extent set forth below, with the Air Force's determination that all remedial action necessary to protect human health and the environment with respect to any hazardous substance remaining on the parcels has been taken.

The review of the Documentation was completed pursuant to CERCLA sections 120(h)(3), and the sole purpose of this letter is to satisfy the requirements of these provisions. The concurrence shall not be construed in any manner inconsistent with any obligation, right or authority existing under the Castle Air Force Base Federal Facility Agreement, and all amendments thereto, 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, whether such information is known as of this date, or is discovered in the future.

Notwithstanding the unresolved EPA comment attached to this FOST regarding the lead based paint, EPA concurs that, with the exception of the IRP sites referenced in the first paragraph of this letter, Parcels A, C2a, F1, F2, G1DK, G2, G3, G4, G5, G6, H2, I, J1b, and L are suitable for transfer for the intended reuse, given the environmental restrictions identified.

If you have any questions regarding this letter, please feel free to call me at (415) 972-3018, or contact me by email at tan.lida@epa.gov.

Sincerely,



Kathleen Johnson
Chief, Federal Facility and Site Cleanup Branch
Superfund Division

cc:

Ms. Carolyn Tatoian-Cain
Remedial Project Manager
DTSC
8800 Cal Center Drive
Sacramento, CA 95826

Mr. Duncan Austin
RWQCB, Central Valley Region
3443 Routier Road
Sacramento, CA 95827-3098

Mr. Geoff Watkin
AFBCA/DD Castle
4500 North Hospital Road
Atwater, CA 95310-4900

Mr. Jay Clark
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Sacramento, CA 95833

Mr. Jeff Palsgaard, Director
Division of Environment Health
Merced County Deptment of Public Health
777 W 22nd Street
Merced, CA 95340



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

March 12, 2004

Mr. Greg Gangnuss
Castle BEC
AFRPA/DB Castle
4500 North Hospital
Atwater, CA 95301-4900

Subject: Castle Air Force Base – Draft Finding of Suitability to Transfer of County of Merced Parcels A, C2a, C2b, F1, F2, G1DK, G2, G3, G4, G5, G6, H2, I, J1b, and L, dated October 1, 2003

Dear Mr. Gangnuss:

The U.S. Environmental Protection Agency (EPA) has reviewed the subject report dated October 1, 2003. The report provides updated environmental conditions on the subject parcels since the original Environmental Basewide Environmental Survey was finalized in December 1993. EPA provides the following comments on the SBEBS:

General Comments:

- 1) Transfer of Landfill 4: The Merced County Department of Environmental Health and Safety expressed its position in a letter dated November ??, 2003 that the County does not wish to receive the closed Landfill 4 as part of the Parcel A transfer. Landfill 4 has been closed and capped under the Castle's CERCLA cleanup program. Because the Air Force will always be responsible for the long-term operation and maintenance of the landfill and to ensure proper implementation of the land use restrictions and institutional controls on the landfill, EPA does not see any benefit in the transfer of Landfill 4 to Merced County. The Department of Defense frequently retains its ownership of the closed landfills at many closing bases. EPA suggests that the Air Force accepts Merced County's request of removing Landfill 4 from this FOST. However, should Merced County agrees to receive Landfill 4, EPA requests that the deed transfer of Landfill 4 not place take till after the Record of Decision for Landfill 4 is finalized.

Specific Comments:

- 1) Section 1.0 Introduction: Please update the reference list to include the recently approved final reports, such as the final Second Five-Year Review and the Final Operating Properly and Successfully (OPS) report.
- 2) Section 2.0 Property Description:
 - a. Please list the five sites with active remediation individually as opposed to combining

DA-5 and SWMU 4.3 and 4.21 into one. Note that the draft SBEBS lists the five sites individually.

- b. Please list the sites with pending closure reports and/or confirmation sampling and note that these sites can not be transferred till after final closures are granted. While most of these sites will likely receive final closure concurrence before the properties are transferred, it is important to acknowledge that these sites have not achieved remedial action completion till final closures have been approved.
- 3) Section 4.0 Environmental Condition of the Property: Please revise the title of the Landfills 4 & 5 ROD to the SCOU ROD Part 3 throughout the document.
- 4) Section 5.0 Deed Restriction and Notifications: Please refer to the general comment on the proposed transfer of Landfill 4.
- 5) Section 5.1 Hazardous Substances Notification: As noted in EPA's comment letter on the draft Operating Properly and Successfully Report (Specific Comment #3, March 10, 2004), as the current property owner of Parcel A, the Air Force is responsible to ensure that all environmental concerns are adequately addressed before the Parcel A can be transferred. The Air Force and Merced Count shall have an agreement on resolving the potential hazardous material releases into the environmental before EPA can concur with the FOST.
- 6) Section 5.5 USTs and ASTs: Please specify the removal date for USTs at B340 and B909 removal and clarify whether they will be removed prior to the property transfer.

If you have any questions regarding this letter, please feel free to call me at (415) 972-3018, or contact me by email at tan.lida@epa.gov.

Sincerely,

Lida Tan
Remedial Project Manager
Superfund Federal Facility Branch
US EPA, Region 9

cc:

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RWQCB, Central Valley Region
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Mr. Kent Hawley, P.E.
Castle Air Force Base
4500 North Hospital Road
Atwater, California 95310-4900

FINDING OF SUITABILITY TO TRANSFER (FOST), PARCELS A, C2a, C2b, F1, F2, G1DK, G2, G3, G4, G5, G6, H2, I and L

Dear Mr. Hawley,

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

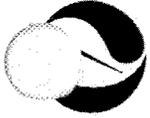
- 1) Section 2, Property Description, page 2-1. In the last paragraph, please include language which states any adjacent properties potentially impacted by the listed active remediation sites are excluded from the proposed transfer property.
- 2) Section 4, Environmental Condition of the Property, page 4-1. The second paragraph in this section is misleading. The text should indicate that Parcel L is ECC 1 because no “storage, release or disposal of hazardous substances or petroleum products has occurred, including no migration of these substances from adjacent areas”. It is possible for a parcel to not meet the definition of ECC 1 even if an IRP site is not on the parcel.
- 3) Section 4, Environmental Condition of the Property, page 4-2. Where appropriate, please insert the date of the final signed OPS and ROD documents.
- 4) Section 5, Deed Restrictions and Notifications. As indicated in this section, the Air Force recognizes the deed shall contain language prohibiting Landfill four (LF-4) from being used for residential purposes, schools, day care or hospitals. A State Land Use Covenant (LUC) must also be signed between the State and the Air Force prior to transfer of this parcel and such language should be added to the FOST. Additionally, this section should state the Air Force will enter into a LUC with the State prohibiting the drilling or use of groundwater due to the contaminated groundwater plume which lies underneath the transfer property.
- 5) Section 5.1, Hazardous Substances Notification. The potential release of hazardous substances, which were identified during the May-July 2003 VSI, must be addressed prior to DTSC’s concurrence with the FOST. All follow-up actions, including removal or remediation of any hazardous substances housekeeping practices or spills, are ultimately the responsibility of the Air Force until the deed has been finalized and signed by all parties.

- 6) Section 5.6, Asbestos-Containing Material (ACM). The information presented in this section does not coincide with what is written in the SEBS. For example, Table 4-21 in the SEBS contains buildings located within Parcel A which are listed as containing ACM which is “damaged”. However, the FOST states ACM is in “good condition or not damaged or deteriorated to the extent that it creates a potential source of airborne fibers.” Please describe how the Air Force has reached the conclusion that any damaged ACM does not require abatement. It is the Air Force’s responsibility to ensure that any potential health hazard from ACM is removed prior to property transfer
- 7) Section 5.8, Lead-Based Paint (LBP), Facilities Other Than Housing. As indicated in our comments on the draft SEBS, the Air Force must address the potential for lead in soil associated with all structures, i.e., residential and industrial buildings. The State considers lead in soil, caused from flaking or chipping paint from structures, to be a CERCLA hazardous substance release. The responsibility of lead in soil, from buildings owned by the Air Force, cannot be transferred to the recipient of the property.
- 8) Section 5.9, Polychlorinated Biphenyls (PCBs). It is the Air Force’s responsibility to test, and remove if necessary, any transformers which may be leaking or which contain PCBs prior to property transfer. Therefore, please coordinate with the County of Merced to determine the condition of the referenced transformers and provide a written summary in the draft final FOST.
- 9) Section 5.10, Radon. Please provide the date the radon survey was conducted.
- 10) Please note these comments have been written by DTSC and do not include any comments which the RWQCB may have concerning the contents of the FOST. Comments from the RWQCB will come under separate cover and from their office.

If you have any questions regarding this letter, please contact me at (916) 255-3603, or via e-mail at FDonofri@dtsc.ca.gov.

Sincerely,

Francesca D’Onofrio
Hazardous Substances Scientist
Office of Military Facilities



Terry Tamminen
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

Edwin F. Lowry, Director
8800 Cal Center Drive
Sacramento, California 95826-3200



Arnold Schwarzenegger
Governor

June 16, 2004

Mr. Greg Gangnuss
Castle Air Force Base
4500 North Hospital Road
Atwater, California 95310-4900

DRAFT FINAL FINDING OF SUITABILITY TO TRANSFER (FOST) AND DRAFT FINAL SUPPLEMENTAL ENVIRONMENTAL BASELINE SURVEY (SEBS) FOR TRANSFER OF PARCELS A, C2a, C2b, F1, F2, G1DK, G2, G3, G4, G5, G6, H2, I and L

Dear Mr. Gangnuss:

We have reviewed the Air Force's Draft Final FOST on the above referenced parcels. While we conclude the majority of our comments have been adequately addressed, DTSC concurrence is conditioned upon resolution of the following issues :

1. FOST, Section 5.1, Hazardous Substances Notification. Based on discussions with County staff, we understand the areas requiring removal or remediation actions, as identified in the VSI's conducted by the Air Force in March 2004, are currently being conducted with oversight by the County. However, prior to finalization of the FOST, please provide DTSC with documentation and a brief summary of all necessary removal or remedial actions which have been completed. DTSC's concurrence is conditioned upon receipt of this information.
2. FOST, Section 5.8, Lead-Based Paint (LBP), Facilities Other Than Housing. As indicated in our previous comments on the draft documents, the State considers lead in soil, caused from flaking or chipping paint from structures, to be a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) hazardous substance release. We understand the Air Force has taken the position that potential lead in soil from flaking paint on structures is not a CERCLA release. DTSC is highly concerned about the potential health issues associated with lead in soil. Consequently, we are in the process of working with the County of Merced on additional investigative measures to be completed prior to redevelopment of these parcels for

Mr. Greg Gangnuss

June 16, 2004

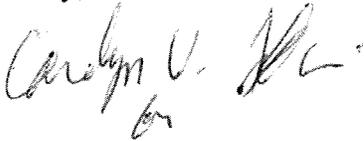
Page 2

residential, daycare or educational purposes. DTSC's concurrence is conditioned upon receipt of this information.

3. SEBS, Section 4.3.1.1., ECC 2 Sites, DTSC has reviewed all the soil and soil gas data from the sites that were designated as Petroleum Hydrocarbons Only, that we requested recently. Our analysis has determined that the Petroleum Fuel Farm Area site (PFFA) is not suitable for unrestricted use due to the fact that contaminants of concern remain that pose a risk to public health and the environment. DTSC is requesting the Air Force take one of two actions. First, the Air Force and DTSC could enter into an interim land use covenant to be terminated once approved site closure has been obtained from DTSC and the Regional Water Quality Control Board. Second, carve the site out of Parcel A and transfer the site after approved site closure.

If you have any questions concerning this letter, please contact me at (916) 255-3603, or Ms. Carrie Tatoian-Cain, the Project Manager at (916) 255-3771.

Sincerely,



Francesca D'Onofrio
Hazardous Substances Scientist
Office of Military Facilities

cc: See next page.

Distribution List

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CA Integrated Waste Management Board
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Sacramento, California 95812

Attachment 5
Air Force Responses to Regulatory Comments

**Response to EPA Comments
on the Finding of Suitability to Transfer (FOST),
Parcels A, C2a, F1, F2, G1DK, G2, G3, G4, G5, G6, H2, I and L**

For convenience, this response repeats EPA's original comment in standard type, followed by the Air Force response in bold. Italics represent additional EPA comment followed by additional AF response

General Comments

1. Transfer of Landfill 4: The Merced County Department of Environmental Health and Safety expressed its position in a letter dated November ??, 2003 that the County does not wish to receive the closed Landfill 4 as part of the Parcel A transfer. Landfill 4 has been closed and capped under the Castle's CERCLA cleanup program. Because the Air Force will always be responsible for the long-term operation and maintenance of the landfill and to ensure proper implementation of the land use restrictions and institutional controls on the landfill, EPA does not see any benefit in the transfer of Landfill 4 to Merced County. The Department of Defense frequently retains its ownership of the closed landfills at many closing bases. EPA suggests that the Air Force accepts Merced County's request of removing Landfill 4 from this FOST. However, should Merced County agree to receive Landfill 4, EPA requests that the deed transfer of Landfill 4 not place take till after the Record of Decision for Landfill 4 is finalized.

The Air Force and the County of Merced entered into an economic development conveyance agreement (Dec 97) which included Landfill 4. The Air Force plans are to abide by that agreement. The Air Force will meet separately with County officials to discuss Landfill 4 transfer acceptance. The EPA request regarding transfer of Landfill 4 and ROD final schedule will be taken into consideration.

EPA provided additional comment (28 Apr 04) as follows: "In EPA General Comment #1 for the draft Parcel A FOST, we request that the Parcel A deed not be transferred to Merced County till the SCOU 3 ROD is finalized. This is also the contingency of EPA's concurrence letter on the OPS. The AF needs to make a written commitment about NOT transferring the Parcel A deed till the final SCOU ROD 3."

Agreed, the Air Force will not transfer property containing Landfill 4 until the SCOU 3 ROD is finalized.

Specific Comments

1. Section 1.0 Introduction: Please update the reference list to include the recently approved final reports, such as the final Second Five-Year Review and the Final Operating Properly and Successfully (OPS) report.

The reference list will be updated as requested to include the final OPS and final second Five-Year Review (both are EPA and DTSC approved).

2. Section 2.0 Property Description:

- a. Please list the five sites with active remediation individually as opposed to combining DA-5 and SWMU 4.3 and 4.21 into one. Note that the draft SBEBS lists the five sites individually.

The five active remediation sites (excluded property) will be listed separately in the FOST. In addition, the following sites will be excluded (unless regulatory closure of sites is provided prior to deed finalization): B1350, DA-4/B1314 and SS-2.

- b. Please list the sites with pending closure reports and/or confirmation sampling and note that these sites can not be transferred till after final closures are granted. While most of these sites will likely receive final closure concurrence before the properties are transferred, it is important to acknowledge that these sites have not achieved remedial action completion till final closures have been approved.

Remedial action sites (non-PHO) that have not been officially closed will be identified, and a statement added that these sites cannot be transferred until the closure reports are approved. These sites include SWMUs 4.4, 4.6, 4.16 and 4.22, for which closure report approval is pending. The status of these sites will be updated in the FOST.

3. Section 4.0 Environmental Condition of the Property: Please revise the title of the Landfills 4 & 5 ROD to the SCOU ROD Part 3 throughout the document.

References to the Landfills 4 & 5 ROD will be changed to the SCOU ROD 3 throughout the document.

4. Section 5.0 Deed Restriction and Notifications: Please refer to the general comment on the proposed transfer of Landfill 4.

Comment noted.

5. Section 5.1 Hazardous Substances Notification: As noted in EPA's comment letter on the draft Operating Properly and Successfully Report (Specific Comment #3, March 10, 2004), as the current property owner of Parcel A, the Air Force is responsible to ensure that all environmental concerns are adequately addressed before the Parcel A can be transferred. The Air Force and Merced County shall have an agreement on resolving the potential hazardous material releases into the environment before EPA can concur with the FOST.

Refer to response to EPA SBEBS specific comment #3.

The VSIs were updated in November 2003 and confirmation inspections

were conducted in March 2004 to determine the status of hazardous materials storage/release issues. Merced County has taken actions to remove transformers/drums and issue citations to former tenants for hazardous materials storage violations, and is responsible for final actions to resolve the pending issues. The current conditions at these locations and any follow-up actions will be updated in the FOST.

6. Section 5.5 USTs and ASTs: Please specify the removal date for USTs at B340 and B909 removal and clarify whether they will be removed prior to the property transfer.

The USTs at B340 and B909 are scheduled to be removed by the summer of 2004. The AFRPA anticipates that these actions will occur prior to property transfer.

7. Though the parcel to be transferred is not intended for residential reuse, and since no sampling for LBP has taken place, the FOST must include a deed restriction to limit reuse to non-residential purposes until an inspection and risk assessment is done and any necessary remedial action has been completed. If the Air Force refuses to include such a deed restriction, this comment should be incorporated as an unresolved comment in the FOST

EPA comment will be identified as an “unresolved” regulator comment in FOST. FYI--Below is the DTSC comment and the Air Force response relating to the same subject:

***DTSC FOST comment #7:** “Section 5.8, Lead-Based Paint (LBP), Facilities Other Than Housing. As indicated in our comments on the draft SEBS, the Air Force must address the potential for lead in soil associated with all structures, i.e., residential and industrial buildings. The State considers lead in soil, caused from flaking or chipping paint from structures, to be a CERCLA hazardous substance release. The responsibility of lead in soil, from buildings owned by the Air Force, cannot be transferred to the recipient of the property.”*

***Air Force response:** “The Air Force does not believe that there has been a CERCLA release of LBP, and considers the property environmentally ready to transfer. The text has not been changed as a result of this comment. The Air Force will carry this forward as an unresolved comment.*

The Air Force procedure for LBP at facilities other than housing and child support facilities requires notification of the possible presence of LBP. Section 5.8 now includes the following clarification and notification provisions:

The disclosure and notification requirements for lead-based paint are in accordance with the most recent AFRPA policy on management of LBP: Operating Procedures for the Management of Lead-Based Paint at Air Force Base Realignment and Closure Installations, May 2001. These procedures incorporate the DoD/EPA Field Guide, HUD regulations, and EPA’s TSCA 403 standards. 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. The Deed will contain notification requiring that if after redevelopment of the property the

transferee or any successor in interest proposes to use the property for residential purposes (to include traditional or private schools, day care facilities for children, and hospitals for human care) the Transferee will first evaluate for and abate any soil-lead hazards and obtain approval for the proposed reuse from the USEPA and DTSC.”

**Response to DTSC Comments
on the Finding of Suitability to Transfer (FOST),
Parcels A, C2a, C2b, F1, F2, G1DK, G2, G3, G4, G5, G6, H2, I and L**

For convenience, this response repeats DTSC's original comment in standard type, followed by the Air Force response in bold.

Comments

1. Section 2, Property Description, page 2-1. In the last paragraph, please include language which states any adjacent properties potentially impacted by the listed active remediation sites are excluded from the proposed transfer property.

There are no adjacent parcels impacted from the excluded active remediation sites. Only the parcels proposed for transfer are addressed in this FOST. No text changes are necessary.

2. Section 4, Environmental Condition of the Property, page 4-1. The second paragraph in this section is misleading. The text should indicate that Parcel L is ECC 1 because no "storage, release or disposal of hazardous substances or petroleum products has occurred, including no migration of these substances from adjacent areas". It is possible for a parcel to not meet the definition of ECC 1 even if an IRP site is not on the parcel.

The text will be revised as requested.

3. Section 4, Environmental Condition of the Property, page 4-2. Where appropriate, please insert the date of the final signed OPS and ROD documents.

Castle AFB received US EPA and State of California concurrence on OPS (Mar04). SCOU ROD 3 is currently in Air Force draft final stages and is scheduled to be submitted to regulatory agencies April 2004.

4. Section 5, Deed Restrictions and Notifications. As indicated in this section, the Air Force recognizes the deed shall contain language prohibiting Landfill four (LF-4) from being used for residential purposes, schools, day care or hospitals. A State Land Use Covenant (LUC) must also be signed between the State and the Air Force prior to transfer of this parcel and such language should be added to the FOST. Additionally, this section should state the Air Force will enter into a LUC with the State prohibiting the drilling or use of groundwater due to the contaminated groundwater plume which lies underneath the transfer property.

Before transfer of the title of the affected property, the Air Force will execute a Land Use Covenant with the State, which will include prohibitions regarding use of Landfill 4 (as stated) and the extraction of contaminated groundwater underlying subject transfer property. An Air Force and State LUC statement has been added to the FOST.

5. Section 5.1, Hazardous Substances Notification. The potential release of hazardous substances, which were identified during the May-July 2003 VSI, must be addressed prior to DTSC's concurrence with the FOST. All follow-up actions, including removal or remediation of any hazardous substances housekeeping practices or spills, are ultimately the responsibility of the Air Force until the deed has been finalized and signed by all parties.

Please refer to response to DTSC SBEBS comment #7.

The VSIs were updated in November 2003 and confirmation inspections were conducted in March 2004 to determine the status of hazardous materials storage/release issues. Merced County has taken actions to remove transformers/drums and issue citations to former tenants for hazardous materials storage violations, and is responsible for final actions to resolve the pending issues. The current conditions at these locations and any follow-up actions will be updated.

6. Section 5.6, Asbestos-Containing Material (ACM). The information presented in this section does not coincide with what is written in the SEBS. For example, Table 4-21 in the SEBS contains buildings located within Parcel A which are listed as containing ACM which is "damaged". However, the FOST states ACM is in "good condition or not damaged or deteriorated to the extent that it creates a potential source of airborne fibers." Please describe how the Air Force has reached the conclusion that any damaged ACM does not require abatement. It is the Air Force's responsibility to ensure that any potential health hazard from ACM is removed prior to property transfer

Please refer to response to DTSC SBEBS comment #13.

The mis-statement will be changed to state that damaged ACM is present in buildings in the parcels to be transferred to Merced County. A new table (Table 5-1) will be inserted that lists the identified buildings with damaged ACM in each parcel. FOST language concerning ACM has been updated. The FOST will provide the location of the damaged ACM as identified in the SEBS. The Air Force agrees that damaged ACM requires abatement prior to the facility being occupied and reused. Currently, the facilities identified with damaged ACM are not being reused. The Air Force will include a notice in the deed that the transferee will be responsible to comply with all applicable Federal, State, and local laws relating to asbestos abatement of the identified damaged ACM.

7. Section 5.8, Lead-Based Paint (LBP), Facilities Other Than Housing. As indicated in our comments on the draft SEBS, the Air Force must address the potential for lead in soil associated with all structures, i.e., residential and industrial buildings. The State considers lead in soil, caused from flaking or chipping paint from structures, to be a CERCLA hazardous substance release. The responsibility of lead in soil, from buildings owned by the Air Force, cannot be transferred to the recipient of the property.

Comment noted. The Air Force does not believe that there has been a CERCLA release of LBP, and considers the property environmentally ready-to-transfer. The text has not been changed as a result of this comment. The Air Force will carry this forward as an unresolved comment.

The Air Force procedure for LBP at facilities other than housing and child support facilities requires notification of the possible presence of LBP. Section 5.8 now includes the following clarification and covenant provisions: The disclosure and notification requirements for lead-based paint are in accordance with the most recent AFRPA policy on management of LBP: Operating Procedures for the Management of Lead-Based Paint at Air Force Base Realignment and Closure Installations, May 2001. These procedures incorporate the DoD/EPA Field Guide, HUD regulations, and EPA's TSCA 403 standards. 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. The Deed will contain notification requiring that if after redevelopment of the property the transferee or any successor in interest proposes to use the property for residential purposes (to include traditional or private schools, day care facilities for children, and hospitals for human care) the Transferee will first evaluate for and abate any soil-lead hazards and obtain approval for the proposed reuse from the USEPA and DTSC.

8. Section 5.9, Polychlorinated Biphenyls (PCBs). It is the Air Force's responsibility to test, and remove if necessary, any transformers which may be leaking or which contain PCBs prior to property transfer. Therefore, please coordinate with the County of Merced to determine the condition of the referenced transformers and provide a written summary in the draft final FOST.

The Air Force sampled the oil in the 40 transformers and electrical switches located in the Merced County Maintenance Yard and analyzed it for PCBs. Analytical results were provided to the County of Merced. None of the transformers or electrical switches was identified as leaking. One electrical switch contained PCBs at 23 ppm while the remaining concentrations were between ND and 4.2 ppm. The County of Merced contracted for and disposed (out-of-state) of all the transformers and electrical switches on March 4, 2004. The status of the transformers (including analytical results for PCB testing) will be summarized and Merced County actions will be updated in the draft final FOST.

9. Section 5.10, Radon. Please provide the date the radon survey was conducted.

The base radon survey was conducted in December 1987 (no change from the 1993 BEBS).

10. Please note these comments have been written by DTSC and do not include any comments which the RWQCB may have concerning the contents of the FOST. Comments from the RWQCB will come under separate cover and from their office.

No review comments were received from the RWQCB.

**Response to Public Notice Comments
on the Finding of Suitability to Transfer (FOST) and the Supplement to
the Basewide Environmental Baseline Survey (SEBS),
Parcels A, C2a, C2b, F1, F2, G1DK, G2, G3, G4, G5, G6, H2, I and L**

For convenience, original comment in standard type, followed by the Air Force response in bold. Please note that the only public comments received during the May 18, 2004 through June 16, 2004 published 30-day comment period were from the State of California, Department of Toxic Substances Control (DTSC)

Comments

1. FOST, Section 5.1, Hazardous Substances Notification. Based on discussions with County staff, we understand the areas requiring removal or remediation actions, as identified in the VSI's conducted by the Air Force in March 2004, are currently being conducted with oversight by the County. However, prior to finalization of the FOST, please provide DTSC with documentation and a brief summary of all necessary removal or remedial actions which have been completed. DTSC's concurrence is conditioned upon receipt of this information..

Merced County has taken actions and removed transformers/switches/drums stored near their B79 storage area and has issued citations to former tenants for hazardous materials storage violations. Merced County is responsible for final actions to resolve the pending issues. County of Merced entered into a signed lease in furtherance of conveyance with the Air Force in December 1997. This signed agreement identifies the lessee (County of Merced) to be liable for any violations and required resultant actions necessary regarding the storage/handling of hazardous material/wastes. The deed will contain language identifying these areas and their conditions along with language, which identifies the County of Merced's liability to perform any necessary environmental actions resultant from their or their sub-lessee's actions. The current conditions at these locations are provided in the subject FOST and SBEBS. This similar comment has previously been identified as "unresolved" and will be noted as such in the final FOST.

2. FOST, Section 5.8, Lead-Based Paint (LBP), Facilities Other Than Housing. As indicated in our previous comments on the draft documents, the State considers lead in soil, caused from flaking or chipping paint from structures, to be a CERCLA hazardous substance release. We understand the Air Force has taken the position that potential lead in soil from flaking paint on structures is not a CERCLA release. DTSC is highly concerned about the potential health issues associated with lead in soil. Consequently, we are in the process of working with the County of Merced on additional investigative measures to be completed prior to redevelopment of these parcels for residential,

daycare or educational purposes. DTSC's concurrence is conditioned upon receipt of this information.

Comment noted. This similar comment has previously been identified as "unresolved" and will be noted as such in the final FOST.

3. SEBS, Section 4.3.1.1., ECC 2 Sites, DTSC has review all the soil and soil gas data from the sites that were designated as Petroleum Hydrocarbons Only that we requested recently. Our analysis has determined that the Petroleum Fuel Farm Area site (PFFA) is not suitable for unrestricted use due to fact that contaminants of concern remain that pose a risk to public health and the environment. DTSC is requesting the Air Force take one of two actions. First, the Air Force and DTSC could enter into an interim land use covenant to be terminated once approved site closure has been obtained from DTSC and the Regional Water Quality Control Board. Second, carve the site out of Parcel A and transfer the site after approved site closure.

The Air Force will include covenant(s) in the deed to ensure that environmental activities will not be disrupted at the PFFA. Such covenants include, but are not limited to, prohibiting activities that could disrupt any corrective action activities or jeopardize the protectiveness of those remedies. The deed will reserve a non-exclusive easement to allow continued access for the Air Force (or its designated contactor) and regulatory agencies to monitor the effectiveness of cleanup. The AFRPA will continue to own and operate the SVE and other treatment systems at this site until they are regulatory approved for closure. The Air Force does not consider the "carv(ing) the site out" or entering into an interim land use covenant with the state as necessary as Petroleum Hydrocarbon-Only sites are suitable for transfer with notification in the deed as described in the FOST (Section 5.3). As described in section 5.3 of subject FOST the site is expected to reach cleanup in year 2006 and the County of Merced has indicated there are no immediate future (~within 5 years) development plans for the property associated with the PFFA. This similar comment has previously been identified as "unresolved" and will be noted as such in the final FOST.

Attachment 6
Unresolved Regulatory FOST and SBEBS Comments

Unresolved Regulatory FOST and SBEBS Comments

For convenience, this response repeats the regulatory agency's original comment in standard type, followed by the Air Force response in bold. The US EPA had one unresolved regulatory comment. The DTSC had three unresolved regulatory comments (DTSC has indicated they will provide additional comments and current comment revisions during the 30-day public notice and comment period).

EPA Unresolved FOST Comment

1. Though the parcel to be transferred is not intended for residential reuse, and since no sampling for LBP has taken place, the FOST must include a deed restriction to limit reuse to non-residential purposes until an inspection and risk assessment is done and any necessary remedial action has been completed. If the Air Force refuses to include such a deed restriction, this comment should be incorporated as an unresolved comment in the FOST.

The Air Force does not believe that there has been a CERCLA release of LBP, and considers the property environmentally ready to transfer. The text has not been changed as a result of this comment. The Air Force will carry this forward as an unresolved comment.

The Air Force procedure for LBP at facilities other than housing and child support facilities requires notification of the possible presence of LBP. Section 5.8 now includes the following clarification and notification provisions:

“The disclosure and notification requirements for lead-based paint are in accordance with the most recent AFRPA policy on management of LBP: Operating Procedures for the Management of Lead-Based Paint at Air Force Base Realignment and Closure Installations, May 2001. These procedures incorporate the DoD/EPA Field Guide, HUD regulations, and EPA’s TSCA 403 standards. 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. The Deed will contain notification requiring that if after redevelopment of the property the transferee or any successor in interest proposes to use the property for residential purposes (to include traditional or private schools, day care facilities for children, and hospitals for human care) the Transferee will first evaluate for and abate any soil-lead hazards and obtain approval for the proposed reuse from the USEPA and DTSC.”

The DTSC had three unresolved regulatory comments (please note-DTSC has indicated they will provide additional comments and current comment revisions during the 30-day public notice and comment period):

DTSC Unresolved FOST Comments

1. Section 5.1, Hazardous Substances Notification. The potential release of hazardous substances, which were identified during the May-July 2003 VSI, must be addressed prior to DTSC's concurrence with the FOST. All follow-up actions, including removal or remediation of any hazardous substances housekeeping practices or spills, are ultimately the responsibility of the Air Force until the deed has been finalized and signed by all parties.

The VSIs were updated in November 2003 and inspections were conducted in March 2004 to determine the status of hazardous materials storage/release issues. Merced County has taken actions to remove transformers/switches/drums stored at their B79 storage area and issue citations to former tenants for hazardous materials storage violations. Merced County is responsible for final actions to resolve the pending issues. Please note that the County of Merced entered into a signed lease in furtherance of conveyance with the Air Force in December 1997. This signed agreement identifies the lessee (County of Merced) to be liable for any violations and required resultant actions necessary regarding the storage/handling of hazardous material/wastes. The deed will contain language identifying these areas and their conditions along with language, which identifies the County of Merced's liability to perform any necessary environmental actions resultant from their or their sub-lessee's actions. The current conditions at these locations and any follow-up actions will be provided as they become available prior to deed signature.

2. Section 5.8, Lead-Based Paint (LBP), Facilities Other Than Housing. As indicated in our comments on the draft SEBS, the Air Force must address the potential for lead in soil associated with all structures, i.e., residential and industrial buildings. The State considers lead in soil, caused from flaking or chipping paint from structures, to be a CERCLA hazardous substance release. The responsibility of lead in soil, from buildings owned by the Air Force, cannot be transferred to the recipient of the property.

Same as provided for EPA comment #1 above.

3. While DTSC recognizes that the sites referenced in this section are "petroleum only" sites and meet the BRAC definition of ECC 2 categorization, more information is needed for some of these sites. As in comment No. 8 above, please provide the State with a summary, along with reference to supporting technical documentation, describing the information and rationale used to make the determination that each individual site where petroleum constituents remain in place is suitable for unrestricted use.

The status of active PHO sites will be updated (new Table 4-1) and additional text information providing PHO site cleanup progress. PHO sites are suitable for transfer with notification in the deed as described in the FOST (Section 5.3). The AFRPA will continue to own and operate the SVE and other treatment systems at these sites until they are regulatory approved for closure.

AF understands that DTSC will be providing additional comments and clarifications regarding above (3) unresolved regulatory comments during the 30-day public notice and comment period (18 May 2004 through 16 June 2004)

Attachment 7
Public Notice Comments Received



Terry Tamminen
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

Edwin F. Lowry, Director
8800 Cal Center Drive
Sacramento, California 95826-3200



Arnold Schwarzenegger
Governor

June 16, 2004

Mr. Greg Gangnuss
Castle Air Force Base
4500 North Hospital Road
Atwater, California 95310-4900

DRAFT FINAL FINDING OF SUITABILITY TO TRANSFER (FOST) AND DRAFT FINAL SUPPLEMENTAL ENVIRONMENTAL BASELINE SURVEY (SEBS) FOR TRANSFER OF PARCELS A,C2a, C2b, F1, F2, G1DK, G2, G3,G4, G5, G6, H2, I and L

Dear Mr. Gangnuss:

We have reviewed the Air Force's Draft Final FOST on the above referenced parcels. While we conclude the majority of our comments have been adequately addressed, DTSC concurrence is conditioned upon resolution of the following issues :

1. FOST, Section 5.1, Hazardous Substances Notification. Based on discussions with County staff, we understand the areas requiring removal or remediation actions, as identified in the VSI's conducted by the Air Force in March 2004, are currently being conducted with oversight by the County. However, prior to finalization of the FOST, please provide DTSC with documentation and a brief summary of all necessary removal or remedial actions which have been completed. DTSC's concurrence is conditioned upon receipt of this information.
2. FOST, Section 5.8, Lead-Based Paint (LBP), Facilities Other Than Housing. As indicated in our previous comments on the draft documents, the State considers lead in soil, caused from flaking or chipping paint from structures, to be a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) hazardous substance release. We understand the Air Force has taken the position that potential lead in soil from flaking paint on structures is not a CERCLA release. DTSC is highly concerned about the potential health issues associated with lead in soil. Consequently, we are in the process of working with the County of Merced on additional investigative measures to be completed prior to redevelopment of these parcels for

Mr. Greg Gangnuss
June 16, 2004
Page 2

residential, daycare or educational purposes. DTSC's concurrence is conditioned upon receipt of this information.

3. SEBS, Section 4.3.1.1., ECC 2 Sites, DTSC has reviewed all the soil and soil gas data from the sites that were designated as Petroleum Hydrocarbons Only, that we requested recently. Our analysis has determined that the Petroleum Fuel Farm Area site (PFFA) is not suitable for unrestricted use due to the fact that contaminants of concern remain that pose a risk to public health and the environment. DTSC is requesting the Air Force take one of two actions. First, the Air Force and DTSC could enter into an interim land use covenant to be terminated once approved site closure has been obtained from DTSC and the Regional Water Quality Control Board. Second, carve the site out of Parcel A and transfer the site after approved site closure.

If you have any questions concerning this letter, please contact me at (916) 255-3603, or Ms. Carrie Tatoian-Cain, the Project Manager at (916) 255-3771.

Sincerely,



Francesca D'Onofrio
Hazardous Substances Scientist
Office of Military Facilities

cc: See next page.

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CA Integrated Waste Management Board
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Sacramento, California 95812

**Response to Public Notice Comments
on the Finding of Suitability to Transfer (FOST) and the Supplement to
the Basewide Environmental Baseline Survey (SEBS),
Parcels A, C2a, C2b, F1, F2, G1DK, G2, G3, G4, G5, G6, H2, I and L**

For convenience, original comment in standard type, followed by the Air Force response in bold. Please note that the only public comments received during the May 18, 2004 through June 16, 2004 published 30-day comment period were from the State of California, Department of Toxic Substances Control (DTSC)

Comments

1. FOST, Section 5.1, Hazardous Substances Notification. Based on discussions with County staff, we understand the areas requiring removal or remediation actions, as identified in the VSIs conducted by the Air Force in March 2004, are currently being conducted with oversight by the County. However, prior to finalization of the FOST, please provide DTSC with documentation and a brief summary of all necessary removal or remedial actions, which have been completed. DTSC's concurrence is conditioned upon receipt of this information..

Section 5.1 discusses four instances of poor management of potentially hazardous materials or waste by the property tenant (Merced County) that could have resulted in releases of hazardous substances. The Air Force has concluded that none of those instances has caused, or is now likely to cause a release of hazardous substances that will require removal or remedial action, as opposed to cleanup and proper disposal of any hazardous wastes that may be present.

At Buildings 59, 79, and 1348, drums, transformers and electrical switches were analyzed for PCBs and other hazardous substances. None were detected above regulatory standards. All items were removed by the County and properly disposed offsite. The soil beneath one leaking drum was tested and found not to contain any hazardous substances above regulated levels.

At Building 325, stains of unknown origin were found on the floor of the paint storage room and on asphalt outside the building. There is no reason to believe that those stains constitute contamination that requires removal or remedial action.

At Building 1323, the VSI noted storage of drums and buckets of unknown liquids and stains on the asphalt in the yard by those drums and buckets. Solid residue was also noted on the floor inside Building 1323. It appears that this could constitute improper management of hazardous materials or waste. Merced County has accepted responsibility for taking appropriate action regarding those items, but there is no reason to believe that removal

or remedial action, as opposed to proper management of the materials and cleanup and proper disposal of any hazardous waste is required.

At Building 871, very small areas (total < 5 sq. ft) of stained soil were noted in the VSI. All indications are that these were small oil spills, or drips.

The County is actively managing these areas. As currently as July 9, 2004, Merced County Environmental Health Division began consolidating all remaining hazardous material/waste items and have entered into negotiations with an environmental contractor for their proper disposal.

The Air Force does not believe any remaining issues constitute a basis for delaying transfer of the property.

2. FOST, Section 5.8, Lead-Based Paint (LBP), Facilities Other Than Housing. As indicated in our previous comments on the draft documents, the State considers lead in soil, caused from flaking or chipping paint from structures, to be a CERCLA hazardous substance release. We understand the Air Force has taken the position that potential lead in soil from flaking paint on structures is not a CERCLA release. DTSC is highly concerned about the potential health issues associated with lead in soil. Consequently, we are in the process of working with the County of Merced on additional investigative measures to be completed prior to redevelopment of these parcels for residential, daycare or educational purposes. DTSC's concurrence is conditioned upon receipt of this information.

Comment noted. This similar comment has previously been identified as "unresolved" and will be noted as such in the final FOST.

3. SEBS, Section 4.3.1.1., ECC 2 Sites, DTSC has review all the soil and soil gas data from the sites that were designated as Petroleum Hydrocarbons Only that we requested recently. Our analysis has determined that the Petroleum Fuel Farm Area site (PFFA) is not suitable for unrestricted use due to fact that contaminants of concern remain that pose a risk to public health and the environment. DTSC is requesting the Air Force take one of two actions. First, the Air Force and DTSC could enter into an interim land use covenant to be terminated once approved site closure has been obtained from DTSC and the Regional Water Quality Control Board. Second, carve the site out of Parcel A and transfer the site after approved site closure.

The Air Force will include covenant(s) in the deed to ensure that environmental activities will not be disrupted at the PFFA. Such covenants include, but are not limited to, prohibiting activities that could disrupt any

corrective action activities or jeopardize the protectiveness of those remedies. The deed will reserve a non-exclusive easement to allow continued access for the Air Force (or its designated contactor) and regulatory agencies to monitor the effectiveness of cleanup. The AFRPA will continue to own and operate the SVE and other treatment systems at this site until they are regulatory approved for closure. The Air Force does not consider the "carv(ing) the site out" or entering into an interim land use covenant with the state as necessary as Petroleum Hydrocarbon-Only sites are suitable for transfer with notification in the deed as described in the FOST (Section 5.3). As described in section 5.3 of subject FOST the site is expected to reach cleanup in year 2006 and the County of Merced has indicated there are no immediate future (~within 5 years) development plans for the property associated with the PFFA. This similar comment has previously been identified as "unresolved" and will be noted as such in the final FOST.