

**3P A-E Contract**

**Castle Airport**

**Supplement to the Basewide Environmental Baseline Survey**

**Consolidated Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5,  
G6, H2, I, J1b and L**

**Draft Final**

**May 2004**

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

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**Air Force Center for Environmental Excellence  
Environmental Services Office/Environmental Restoration  
Brooks City-Base, TX 78235**

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Jacobs prepared this report under the supervision of the professionals whose signatures appear below.

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## ENCLOSURE

Visual Site Inspection Reports (Electronic Copies on CD)

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## LIST OF ACRONYMS AND ABBREVIATIONS

µg/L	micrograms per liter
1,2-DCA	1,2-dichloroethane
ACM	asbestos containing material
AFB	Air Force Base
AFBCA	Air Force Base Conversion Agency
AFCEE	Air Force Center for Environmental Excellence
AFRPA	Air Force Real Property Agency
AST	aboveground storage tank
ATSDR	Agency for Toxic Substances and Disease Registry
B	Building
BCT	Base Conversion Team
BEBS	Basewide Environmental Baseline Survey
bgs	below ground surface
BoP	Bureau of Prisons
BTEX	benzene, toluene, ethylbenzene and xylenes
CSBTF	Castle Soils Bioremediation Treatment Facility
CB	Comprehensive Basewide
CB ROD–Part 1	Comprehensive Basewide Record of Decision–Part 1
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
<i>cis</i> -1,2-DCE	<i>cis</i> -1,2-dichloroethene
COC	contaminant of concern
CY	calendar year
D&R	Disposal and Reuse
DA-#	Discharge Area-#
DOD	Department of Defense
DP-#	Disposal Pit-#
DRMO	Defense Reutilization and Marketing Office
DTSC	Department of Toxic Substances Control
EBS	Environmental Baseline Survey
ECC	Environmental Condition Category
EPA	Environmental Protection Agency
ETC-#	Earth Technology Corporation-#

## LIST OF ACRONYMS AND ABBREVIATIONS

F-#	Aircraft Hangar F-#
FAA	US Federal Aviation Administration
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FOSL	Findings of Suitability to Lease
FS-#	Fuel Spill-#
GAC	granular activated carbon
IRP	Installation Restoration Program
JP-#	Jet Propulsion-#
LBP	lead-based paint
LF-#	Landfill-#
LTGSP	Long-Term Groundwater Sampling Program
LUFT	Leaking Underground Fuel Tank
MCL	maximum contaminant level
MW#	monitoring well#
NFA	no further action
NPDES	National Pollutant Discharge Elimination System
OPS	Demonstration of Remedial Actions Operating Properly and Successfully
OU-2	Operable Unit 2
OWS	oil/water separator
PAH	polychlorinated aromatic hydrocarbon
PCB	polychlorinated biphenyl
pCi/L	picocuries per liter
PFFA	Petroleum Fuel Farm Area
PHO	petroleum hydrocarbon-only
PW-#	Production Well-#
POL	Petroleum, Oil and Lubricants
RI/FS	remedial investigation/feasibility study
ROD	Record of Decision

## LIST OF ACRONYMS AND ABBREVIATIONS

RWQCB	Regional Water Quality Control Board
SCOU	Source Control Operable Unit
SDS	Storm Drain System
SBEBBS	Supplement to the Basewide Environmental Baseline Survey
SS-#	Sewer Segment-#
SVE	soil vapor extraction
SVOC	semi-volatile organic compound
SWMU	Solid Waste Management Unit
TCC-#	Test Center Complex-#
TCE	trichloroethene
TCE	trichloroethene
TEPH	total extractable petroleum hydrocarbons
TVPH	total volatile petroleum hydrocarbons
UFL-#	Underground Fuel Leak-#
USAF	United States Air Force
UST	underground storage tank
VOC	volatile organic compound
VSI	visual site inspection
WDR	Waste Discharge Requirement
WPI	Waste Policy Institute
WWTP	wastewater treatment plant

## 1 EXECUTIVE SUMMARY

*Note: This entire section has been updated substantially since the 1993 BEBS.*

This Supplement to the Basewide Environmental Baseline Survey (SBEBS) documents environmental conditions at and in the vicinity of a consolidated list of parcels at Castle Airport, California. The list of parcels, designated the Consolidated Parcels, includes Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, J1b and L. The only Castle Airport parcels not yet transferred that are not included in this consolidated SBEBS are Parcel J2 (Landfill B2) and Parcel B5. Parcel J2 (Landfill B2) will be addressed in a separate SBEBS at a later date. Parcel B5 is licensed to the United States Federal Aviation Administration (FAA). This Draft Final document was revised in accordance with regulatory review comments. Copies of the review comments and Air Force responses are provided in [Appendices A](#) and [B](#), respectively.

The SBEBS is based on a review of the December 1993 Castle Air Force Base (AFB) Basewide Environmental Baseline Survey (BEBS), as supplemented by current primary documents that describe the present conditions at Installation Restoration Program (IRP) sites, Underground Storage Tank (UST) sites and other sites with environmental concerns. It is also based on Visual Site Inspections (VSIs) of the listed parcels which were conducted in October – December 2003. The SBEBS also includes an assessment of the adjacent properties contiguous to, or relatively near, the subject parcels that could pose environmental concern and/or affect the subject property. The following Parcels are evaluated in this SBEBS:

**Table 1-1  
Parcels Evaluated in the SBEBS**

Parcel	Name	Acres	Buildings/Structures
A	Castle Airport	1,624.82	127
C1	Veterans (Castle) Park	18.28	5
C2a	Castle Air Museum	31.40	5
C2b	Castle Air Museum Storage	(included in Parcel A)	1 (B51)
E	Hospital	13.92	7
F1	Dormitory Area	35.17	19
F2	Recreational Facilities	41.84	3
F3	High School Warehouses	4.09	2
G1DK	Aviation Challenge	60.55	10
G2	Commercial Area	36.18	12
G3	Storage Area and Yard	5.22	1

**Table 1-1  
 Parcels Evaluated in the SBEBS**

Parcel	Name	Acres	Buildings/Structures
G4	Previous Landfill 1 Area	42.38	None
G5	Warehouse Area	11.61	1
G6	Airport Billeting	2.6	3
H2	A Woman's Place	1.95	3
I	Credit Union	1.30	1
J1b	Castle Gardens Housing	61.28	234
L	Parcel L	4.16	None

The parcel boundaries and features (buildings and roads) are shown on [Figure 1](#). The specific buildings and structures are listed in the attached Facility Property Matrix ([Table 1-2](#)) and in Parcel J1b Facilities ([Table 1-3](#)). [Table 1-2](#) was modified from the Castle BEBS version (Table 5-1). Additional facilities (existing and demolished), not listed in [Table 1-2](#), were identified by the VSIs. [Table 1-2](#) has been updated with the available information for these facilities.

SBEBSs for Findings of Suitability to Lease (FOSL) were previously generated for many of the parcels listed in Table 1-1. The information in previous SBEBSs for the above parcels was used only as a check for completeness. In a previous SBEBS, Parcel A1 was historically defined as consisting of former Parcels F1, F2, G2, G3, G4, G5, and a portion of G1 (now renamed G6). Parcel A1 also included a portion of C2a (electrical substation). The designation Parcel A1 will not be used in this SBEBS. The boundaries for parcels specified in this SBEBS are defined in the Disposal and Reuse Record of Decision of Castle AFB (D&R ROD) dated 3 January 1995.

Facilities within the Consolidated Parcels were initially evaluated for environmental contamination status resulting from the storage, use and disposal or release of hazardous substances and petroleum products. Based on the available records and environmental data in 1993, each facility was classified as one of the following seven DOD Environmental Condition Categories (ECC):

- **Category 1**      Areas where no storage, release or disposal of hazardous substances or petroleum products has occurred, including no migration of these substances from adjacent areas.
- **Category 2**      Areas where only storage of hazardous substances or petroleum products has occurred, but no release, disposal or migration from adjacent areas has occurred.

- Category 3 Areas where storage, release, disposal and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require a removal or remedial action.
- Category 4 Areas where storage, release, disposal and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken.
- Category 5 Areas where storage, release, disposal and/or migration of hazardous substances or petroleum products, removal and/or remedial actions are underway, but all required actions have not yet been taken.
- Category 6 Areas where storage, release, disposal and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented.
- Category 7 Areas that are unevaluated or required additional evaluation.

The initial ECC designation for each parcel is shown on Figure 5-1 in the Castle BEBS, and the initial ECC designation for each facility in the Consolidated and adjacent parcels is listed in [Tables 1-2](#) and [5-1](#), respectively.

The majority of Parcels A, C2b, E, F1, F2, F3, G1DK, G2, G3, G5, G6, H2, I, J2b, and L were originally classified in the Castle BEBS as ECC 7. All of Parcels C1 and G4 and portions of Parcels A and F2 were originally classified as ECC 6. All of Parcels C2a and G6 and small portions of Parcels A (near Building [B]1205) and H2 (near B1107) were originally classified as ECC 5. Two facilities (B1906 and B1907) northwest of the runway in Parcel A were classified as ECC 2. IRP sites requiring remedial action due to soil or groundwater contamination were initially classified as ECC 5 or 6 (possibly ECC 7). IRP sites with no required remedial action (NFA—no action sites) were classified as ECC 1, 2 or 3. IRP sites with completed remedial actions (NFA—response complete) were classified as ECC 4. The original ECC classifications for all facilities within the Consolidated Parcels are listed in [Table 1-2](#) (sorted by parcel).

After publication of the Castle BEBS, CERCLA Section 120(h)(4)(A) was revised to clarify the meaning of uncontaminated property for purposes of transfer by the United States. The statement “stored for one year or more” was deleted from the definition of uncontaminated property. Also, in the fall of 1996, the DOD revised the ECCs to remove the reference to petroleum products from categories 3 through 6. The property identified for transfer was reclassified using the following revised categories:

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

Based on SCOU RI/FS findings and subsequent removal/remediation actions at IRP sites, many ECC classifications have changed. The rationale and reasons for revising the original ECC classifications for these sites are presented in [Table 1-4](#).

**Table 1-4  
Rationale for ECC Classification Changes**

Parcels	Original Environmental Classification (1993)	Current Environmental Classification (2004)	Rationale/ Remedial Action Status	Text References
L	ECC 1	ECC 1	<ul style="list-style-type: none"> <li>No hazardous substances or petroleum products stored or released</li> </ul>	4.3.18
A F1 G2 G5	ECC 2 ECC 5 ECC 6 ECC 7	ECC 2	<ul style="list-style-type: none"> <li>Only petroleum products stored or released</li> <li>Excavation</li> <li>SVE/bioventing/IR</li> <li>Closure sampling</li> <li>Closure report approved</li> <li>NFA—no action</li> <li>NFA—exempt</li> <li>NFA—response completed</li> </ul>	Remedial actions pending or completed 4.3.1.1 4.3.6 4.3.10 4.3.13
A E F1 F2 G2 G3 G4	ECC 2 ECC 7	ECC 3	<ul style="list-style-type: none"> <li>No hazardous substances released above RAOs</li> <li>NFA—no action</li> </ul>	4.3.1.2 4.3.5 4.3.6 4.3.7 4.3.10 4.3.11 4.3.12
A C1 C2a E F1 F3 G1DK G2 G3 G4 G5 G6 H2 I J1b	ECC 5 ECC 6 ECC 7	ECC 4	<ul style="list-style-type: none"> <li>Any remaining hazardous substance contamination &lt; RAOs; remedial action completed or remedial treatment systems operating properly and successfully</li> <li>Groundwater treatment</li> <li>Consolidation and capping, maintenance and monitoring, institutional controls</li> <li>SVE/bioventing/IR completed</li> <li>Excavation completed</li> <li>Closure sampling completed</li> <li>Closure report approved</li> <li>NFA—response completed</li> </ul>	4.3.1.3 4.3.2 4.3.3 4.3.5 4.3.6 4.3.8 4.3.9 4.3.10 4.3.11 4.3.12 4.3.13 4.3.14 4.3.15 4.3.16 4.3.17
A C2b	ECC 5 ECC 6 ECC 7	ECC 5	<ul style="list-style-type: none"> <li>Hazardous substance contamination &gt; RAOs; remedial action in progress</li> <li>SVE/bioventing/IR</li> <li>Excavation</li> <li>Consolidation and capping, maintenance and monitoring, institutional controls</li> <li>Closure sampling</li> <li>Closure report submitted</li> <li>ECC 4 upon closure approval</li> </ul>	Remedial actions planned, in progress or completed 4.3.1.4 4.3.4

**Notes**

- ECC Environmental Condition Category
- IR intrinsic remediation
- NFA no further action
- RAO remedial action objective
- SVE soil vapor extraction

Property in the first four categories (ECC 1 through 4) are eligible for deed transfer. Property in the last three categories (ECC 5 through 7) are not typically considered for deed transfer until all necessary remedial action has been taken and the property has been reclassified into one of the first four categories. These reclassified properties are eligible for transfer on a case-by-case basis. The ECC classifications for IRP sites and groundwater contamination in each parcel are discussed in [Section 4.3](#). The overall ECC classifications for the individual parcels and the combined Consolidated Parcels are summarized in [Section 6](#).

Results from the *Long-Term Groundwater Sampling Program 2003 Annual Report* (LTGSP 2003 Annual Report) (Jacobs, 2004b) indicate that much of Castle Airport is currently underlain by trichloroethene (TCE) groundwater contamination. Parcels with groundwater contamination present include A, C1, C2a, C2b, E, F1, F3, G1DK, G2, G3, G5, G6, H2, I, and J1b. Parcels F2, G4 and L are presently below cleanup levels with respect to groundwater contamination. Adjacent Parcels B1 and B2 also have groundwater contamination present that exceeds cleanup levels. The groundwater contamination is currently being treated by the Operable Unit 2 (OU-2), and Phase 3 groundwater treatment systems in accordance with the *Comprehensive Basewide Record of Decision–Part 1* (CB ROD–Part 1) (United States Air Force [USAF], 1997a). For the parcel property and IRP sites inside the groundwater plume with no further soil remediation required, the appropriate classification is now ECC 4. The *Demonstration of Remedial Actions Operating Properly and Successfully* (OPS) (Jacobs, 2004a [Final dated February 2004]) indicates that all groundwater systems are operating properly and successfully as required for land transfer. For the parcel property outside the groundwater plume with no soil remediation required, the appropriate characterization is now either ECC 1 or ECC 3. The current ECC classifications for IRP sites (soil) are discussed in [Section 6](#).

The *Final Castle Airport Source Control Operable Unit (SCOU) Remedial Investigation/ Feasibility Study* (RI/FS) (SCOU RI/FS) (Jacobs, 1997a) identified vadose zone soil contamination in the Consolidated Parcels and on adjacent parcels (B1, B2, B3, B4, B5). Soil vapor extraction (SVE), bioventing, consolidation, intrinsic remediation, removal by excavation and engineered landfill cover were considered as alternatives for remediation of the vadose zone contamination. The *Source Control Operable Unit Record of Decision Part 2* (SCOU ROD 2) (EarthTech, 2003), which specifies the selected remedies for all SVE sites in the Consolidated Parcels, states that SVE sites (Comprehensive Environmental

Response, Compensation and Liability Act [CERCLA] only) will not be transferred prior to completion of SVE and approval of the closure report unless suitable institutional controls are implemented to protect the tenants and operating systems. Parcel A contains sites with active SVE/bioventing treatment systems. The affected sites, B51/B54 Group, Discharge Area [DA]-5/Solid Waste Management Units (SWMUs) 4.3 and 4.21, DA-4/B1314 and B1350, will be excluded from the transferred parcels, unless site closure is attained beforehand. However, the petroleum hydrocarbon-only (PHO) sites (non-CERCLA) with active SVE treatment systems (Test Center Complex [TCC]-1 Group, Petroleum Fuel Farm Area [PFFA] Group, Fuel Spill [FS]-4, Underground Fuel Leak [UFL]-2, JP-4, B1324, B1325 FS-3 and UFL-3 in Parcel A; UFL-1 and B785 in Parcel G2) for fuel contaminants are included in the transferred parcels. The PHO SVE sites are shown on [Figure 2](#). The Air Force will continue to own and operate the SVE systems, including all aboveground components. Completion of remediation and site closure is expected by 2005 for most of those PHO SVE sites. Also excluded from the property transfer are ETC-8, for which a final remedy has not been determined, and SS-2, which has not been approved for closure. SS-2 is a SCOU ROD 2 site. ETC-8 is addressed in the Draft Final *Source Control Operable Unit Record of Decision Part 3* (SCOU ROD 3), dated April 2004.

[Section 4.2](#) of the SBEBs lists the current status of environmental IRP sites, UST sites, and Oil/Water Separator (OWS) sites, and includes the contaminants of concern (COCs) on the Consolidated Parcels. [Section 5.3](#) lists the current status of environmental IRP sites, UST sites, Aboveground Storage Tank (AST) sites, and OWS sites, and includes the COCs on adjacent parcels and states that they have no significant impact on the Consolidated Parcels, except for the groundwater contamination originating in Parcel B2.

## 2 INTRODUCTION

*Note: The following subsections have been updated substantially since the 1993 BEBS: 2.2 and 2.3.*

### 2.1 PURPOSE OF SURVEY

This SBEBBS has been prepared to document the physical and environmental conditions of Air Force property at Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, J1b and L located at Castle Airport, California, resulting from the storage, disposal and release of hazardous substances and petroleum products over the base's history. The SBEBBS collects into a single document all available information to establish a baseline for use by the Air Force Real Property Agency (AFRPA) in making decisions concerning real property transactions. It updates information on environmental changes since the BEBS was published.

### 2.2 BOUNDARIES OF PARCEL AND SCOPE OF SURVEY

The area encompassing the Consolidated Parcels includes most of former Castle AFB, except for Parcels B1, B2, B3, B4, B5, J2 and J1a. The boundaries of the Consolidated Parcels are shown on [Figure 1](#).

This SBEBBS is to facilitate the transfer by deed of leased properties to the present lease holders. The primary lease holder and local reuse agency is the County of Merced. To identify known or potential environmental concerns, VSIs were conducted in October – December 2003. VSI findings are reported in [Section 4](#). This SBEBBS documents that the environmental findings for the above parcels support justification for property transfer per CERCLA 120 h (3).

[Figure 1](#) depicts an area map showing the Consolidated Parcels and the contained facilities and depicts the boundary of the area under evaluation for this study. [Figure 2](#) shows the active PHO/UST corrective action sites (ECC 2) and NFA–No Action Sites (ECC 1 and 3). [Figure 3](#) shows the remedial action sites (ECC 4 and 5). The groundwater TCE plumes and groundwater treatment systems are also shown on [Figures 2 and 3](#). [Figures 2 and 3](#) show

environmental concerns within 0.25 miles of the Consolidated Parcels boundaries. [Figure 4](#) shows the 100-year floodplain boundary (from 1995).

A comprehensive map of Castle Airport is shown on [Plate 1](#). This map shows all CERCLA IRP and PHO sites within each parcel, as well as the groundwater TCE plume contours. Tables on [Plate 1](#) list the IRP and PHO sites by parcel. The sites are color-coded for each SCOUD ROD and remedial alternative.

## 2.3 SITE HISTORY AND CURRENT USE

Refer to the BEBS, Section 3.1 and Appendix E, for a full discussion of base history and historic land use. Construction years and historical functions for the facilities included in the property are summarized in [Table 1-2](#).

Legal property descriptions will be contained in the real estate transfer documents. The Consolidated Parcels contain airport runways, airport taxiways, inactive dormitories, inactive office buildings, inactive storage buildings, inactive housing units, active leased buildings, maintenance shops and storage tanks. Portions of the Consolidated Parcels are currently occupied by various organizations with subleases to the County of Merced which has an interim lease arrangement with the Air Force in furtherance of a public benefit conveyance. The proposed non-residential use of Parcels A, C2b, F1, F2, G1DK, G2, G3, G4, G5, G6, H2, I, and L by the County of Merced, which is the Local Reuse Authority, will facilitate base reuse and provide for the subleasing of the remaining unused properties. The County of Merced presently subleases buildings and facilities to private commercial and industrial companies. Parcels A, C2b, F1, F2, G1DK, G2, G3, G4, G5, G6, H2, I and L are leased to the County of Merced and many of its facilities are subleased to private commercial and industrial companies. Parcel C1 is leased to the City of Atwater. Parcel C2a is leased to the Castle Air Museum Foundation. Parcel E is leased to the Bloss Memorial Healthcare District. Parcel F3 is leased to the Merced Union High School District. Parcel J1b is leased to Castle@water, LLC. Parcel L is licensed for cattle grazing and is deeded to the County as not for public sale. Current reuse options are described in the *Final Environmental Impact Statement (FEIS), Disposal and Reuse of Castle Air Force Base* (United States Air Force [USAF], 1994) and the *Disposal and Reuse ROD, Castle Air Force Base* (USAF, 1995).

### 3 SURVEY METHODOLOGY

*Note: The following subsections have been updated substantially since the 1993 BEBS: 3.1 and 3.3.*

#### 3.1 LIST AND DESCRIPTION OF DOCUMENTS REVIEWED

Much of the data used in preparing this supplement was obtained from the December 1993 Castle AFB BEBS (EarthTech, 1993). The data and information contained in the BEBS was prepared in accordance with DOD policies and guidance, as it pertains to the procedures for conducting an EBS. These procedures, which involve a record search, interviews and VSI, are hereby incorporated by reference.

Documents and information reviewed include:

1. *Final Environmental Impact Statement, Disposal and Reuse of Castle Air Force Base, California* (FEIS) (USAF, 1994).
2. *The Basewide Environmental Baseline Survey, Castle Air Force Base, California* (BEBS) (EarthTech, 1993) (as supplemented).
3. Information from Castle Airport's AFRPA staff which has supplemented the findings of the BEBS.
4. Data available from recent investigations at IRP sites.
5. *The Comprehensive Basewide Record of Decision – Part 1 (Groundwater)* (CB ROD–Part 1) (USAF, 1997a).
6. *Long-Term Groundwater Sampling Program 2003 Annual Report* (LTGSP 2003 Annual Report) (Jacobs, 2004b).
7. *The Source Control Operable Unit Remedial Investigation/ Feasibility Study* (SCOU RI/FS) (Jacobs, 1997b).
8. *The Comprehensive Basewide Remedial Investigation/Feasibility Study—Part 2* (CB RI/FS–Part 2) (Jacobs 2002b).
9. *The Source Control Operable Unit Record of Decision Part 1* (SCOU ROD 1), (WPI, 2002).
10. *The Source Control Operable Unit Record of Decision Part 2* (SCOU ROD 2), (EarthTech, 2003).
11. *The Draft Final Source Control Operable Unit Record of Decision Part 3*, (Draft Final SCOU ROD 3) (Jacobs 2004c) – Final dated \_\_\_\_\_.

12. The *Demonstration of Remedial Actions Operating Properly and Successfully* (OPS) (Jacobs, 2004a) – Final dated February 2004.
13. The *Five-Year Review Report (1998 – 2002)* (Five-Year Review) (Jacobs, 2004d) – Final dated January 2004.
14. *Disposal and Reuse ROD, Castle Air Force Base* (USAF, 1995).
15. Various IRP, petroleum hydrocarbon and UST site documentation, including work plans, closure reports and agency closure approval letters.
16. The Visual Site Inspection (VSI) reports, dated October – December 2003 (updates of May – July 2003 VSIs).

### **3.2 PERSONNEL INTERVIEWS**

AFRPA personnel who are presently working at Castle Airport and have worked on Castle Airport environmental projects during the last ten years were questioned about the present status of IRP, UST, SWMU, OWS and VSI discovery sites. Previous CERCLA Investigations (PA, RI) also conducted interviews with former Air Force personnel who worked at Castle AFB and had knowledge of hazardous waste disposal sites.

### **3.3 INSPECTIONS OF PROPERTY CONDUCTED**

VSIs of the property were conducted October – December 2003. The purpose of the VSIs was to establish the environmental condition of the property and note any inconsistencies with the BEBS or changes since previous VSIs conducted in May 1995. This included, but was not limited to, identifying stained areas, stressed vegetation, equipment leaks, unnatural odors, asbestos-containing material (ACM) in a damaged or deteriorated condition, peeling lead-based paint (LBP) and other such irregularities that might indicate a condition that may pose an unacceptable risk to human health or the environment. VSIs were not performed for interiors of occupied buildings, but interior inspections were performed and reported in the previous FOSL and lease documents pertaining to these properties.

Each VSI report includes a signed survey form, a site map and photographs of current site conditions. A complete set of these reports is enclosed on a [CD](#). Signed copies of the VSI reports are on file at the Castle AFRPA office. The VSI findings are discussed in [Section 4](#).

## 4 FINDINGS

*Note: The following subsections have been updated substantially since the 1993 BEBS: all except 4.8 and 4.16.*

### 4.1 ENVIRONMENTAL RESOURCES/FACTORS EVALUATED

The following environmental factors or resources were evaluated in preparing the SBEBS. In some instances no new work was performed, as the BEBS adequately evaluated the subject and no change in the condition of this property had occurred since the BEBS was prepared. Current information on infrastructure services and utilities was provided by Jim Pichner, Castle Airport Facilities Manager.

#### 4.1.1 Site Hydrology

Surface hydrology and stormwater collection/discharge are described in the BEBS. A network of extraction/injection wells was installed for the groundwater treatment systems. Pumping at these wells influences groundwater flow and provides hydraulic control for TCE plume capture. The hydrostratigraphic zones and effects of groundwater treatment system operation on subsurface hydrology are described in the LTGSP 2003 Annual Report.

Stormwater runoff is collected by the storm drain system and is discharged to the local canals under an National Pollutant Discharge Elimination System (NPDES) permit.

#### 4.1.2 Communication Utilities

Telephone and internet service is provided by MercedNet via underground cables. Cable television service is provided by AT&T.

#### 4.1.3 Potable Water Supply

Drinking water is provided from two onsite wells (production well [PW]10 and PW12), each capable of pumping 2,500 gpm. The Castle Gardens housing units in Parcel J1b can also be supplied by City of Atwater municipal wells.

#### 4.1.4 Wastewater

The asphalt-lined aeration ponds (Facility 936) connected to the Castle AFB Wastewater Treatment Plant (WWTP) were constructed in 1978 and are located in Parcel F2 ([Figure 1](#)). The WWTP (in Parcel A) ceased operation upon connection to the City of Atwater wastewater treatment plant and the closure of Castle AFB 30 September 1995. The sediments in the aeration ponds were removed by the Air Combat Command and the aeration ponds were closed with the demolition of the WWTP. The piping that extends from the ponds to the treatment plant and from the ponds to Canal Creek was abandoned in place by grout sealing the pipe ends.

#### 4.1.5 Solid Waste

Solid waste collection is contracted by the individual lease and sublease holders, and the waste is hauled offsite by Waste Management, Inc., to a landfill operated by Merced County.

#### 4.1.6 Energy

Electricity is provided by Merced Irrigation District from an on-site substation. Natural gas is supplied through an underground pipeline by West Coast Gas Company.

### 4.2 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS

The BEBS identified 196 IRP soil sites (SCOU) within the Consolidated Parcels, further discussed in [Section 4.2.3](#).

#### 4.2.1 Hazardous Materials Management

The hazardous materials management utilized at Castle AFB is discussed in the BEBS. There is record of a Defense Reutilization and Marketing Office (DRMO) storage yard west of the current location of B871 within the Consolidated Parcels. This area was also used as a railroad engine and repair yard. This location is now an IRP site (B871) and a removal action for this site is listed in [Section 4.3.7](#) (B871 was excavated and is now closed as NFA). In addition, there is a record of previous hazardous material storage within the Consolidated Parcels at Buildings 35, 51, 59, 65, 84, 88, 118, 325, 340, 508, 561, 907, 908, 917, 1200, 1201, 1253, 1260, 1309, 1310, 1314, 1316, 1319, 1325, 1330, 1335, 1340, 1344,

1350, 1529, 1532, and 1545 within Parcel A; B1182 in Parcel E; Buildings 551, 554 and 556 in Parcel F1; B535 in Parcel F3; Buildings 443, 445, 1005 and 1007 in Parcel G1DK; Buildings 540 and 545 in Parcel G2; Buildings 850 and 851 in Parcel G3; and B806 in Parcel G5.

The hazardous materials previously stored in these buildings are listed in the BEBS Table C-1. Previous hazardous materials storage in quantities exceeding 40 CFR 373 thresholds are listed in the BEBS Table C-2. The listed hazardous materials were transferred from the Air Force to the DRMO and removed from Castle Airport prior to 1995.

The proper use of hazardous materials and any resultant storage and disposal of hazardous materials will be in accordance with applicable rules and regulations and is the responsibility of the tenant as stipulated in lease documents. The VSIs (May through July 2003) identified the following hazardous materials stored by County of Merced operations and former County sublease tenants:

#### **A. Hazardous Materials Storage**

- Unlabeled drums containing unidentified waste materials are present at B1323, B1324, B1529, B1531 and B1356.
- Drums, 5-gallon buckets and other containers of paint, varnish and solvents are present at B175, B325, B340, B1253, B1319, B1350, B1405, B1509 and B1561.
- B1526 contains a locked hazardous waste cabinet.
- Electrical transformers, lead-lined switches and drums, possibly containing transformer or waste oil are stored in the County of Merced yard near B79 and B59. Electrical transformers are also stored at B1348. These items were removed by the County of Merced in March 2004 (see update below).
- Used motor oil is present at B1405 and B1532. Car batteries are also stored at B1532.
- Gas cylinders and tanks of chlorine and other gases are stored at B705 (Parcel G2), B1350 and B1584.
- A drum containing an unknown white granular solid is present at B1404.

Except as indicated, these buildings are located in Parcel A.

### Storage Condition Update (March 2004)

Based on recent VSIs (October – December 2003) and informal site inspections (March 2004), the current conditions of the previously identified hazardous materials storage issues are as follows:

- In Parcel A, drums and electrical transformers/switches at B59, B79 and B1348 were sampled and analyzed for PCBs and other hazardous substances. None was detected above regulated levels. These items were removed by Merced County on 4 March 2004 and transported off-site for disposal.
- The status of all other materials has not changed.
- Merced County has issued citations to former tenants for violations related to hazardous materials storage.

### **B. Potential Releases of Hazardous Materials**

- PFFA (B59): Drums, possibly containing transformer or waste oil, have leaked onto the ground adjacent to the storm drain ditch. The drums were removed by the County of Merced in March 2004 (see update below).
- B325: Stains on the floor in the paint storage room and on the asphalt northwest of B325 may be due to spilled paint and solvents.
- B871: Apparent oil staining is visible on the ground behind B871 (Parcel F2).
- B1323: Spills from drums and 5-gallon buckets are evident on the asphalt in the yard across from B1325; unidentified solid residue is on the floor inside B1323.

Except as indicated, these buildings are located in Parcel A.

Based on recent VSIs (October – December 2003) and informal site inspections (March 2004), the status of previously identified potential releases has not changed, except at B59:

- In September 2003, four drums and soil beneath one leaking drum were sampled and analyzed for PCBs and other hazardous substances. Water from one drum contained TEPH (36,000 mg/L), TVPH (190 mg/L),  $\delta$ -BHC (3.6  $\mu$ g/L), and 4,4'-DDT (3.6  $\mu$ g/L), but no VOCs or PCBs were detected in any of the drum samples. PCB concentrations in soil samples decreased from 0.021 mg/kg (4" bgs) to ND (2' bgs), as did TEPH concentrations (7,100 mg/kg at 4" bgs and 170 mg/kg at 5' bgs).

The County of Merced has been notified to remedy these hazardous material storage areas and requested to provide status of all material storage issues identified in the VSI reports.

#### **4.2.2 Hazardous Waste Management**

Castle AFB hazardous waste management is discussed in the BEBS. Former hazardous waste collection points and locations are listed in Table 3-1 of the BEBS. B850 served as a Base 90-day Hazardous Waste Management Facility. In addition, there is a record of a DRMO storage yard west of the current location of B871 within Parcel F2. This area was also used as a railroad engine and repair yard. During construction of B871 in about 1981, several crushed 55 gallon drums were uncovered and removed by the Air Combat Command. All Air Force military operations generating hazardous waste ceased in 1995. All hazardous waste from Air Force military operations has been removed from Castle by the DRMO organization based in Stockton, California. Each Castle UST site project or CERCLA IRP site project has a Hazardous Waste Management Plan and all investigation derived wastes, excavated hazardous wastes and remediation process wastes have been properly disposed of according to regulatory requirements.

All of the Consolidated Parcels, except for Parcel L, which will be transferred by negotiated sale, are leased in furtherance of a public benefit conveyance by deed transfer. The proper storage and disposal of hazardous waste to regulatory standards is the responsibility of the tenant as stipulated in lease documents. The VSIs conducted in May – July 2003 observed the following Castle Airport environmental IRP and/or UST regulated waste storage conditions:

#### **Hazardous Material Condition Report**

- Drums containing drill cuttings are present at B1197 and B1403 in Parcel A. B1197 also has tanks with condensate water from SVE systems and a sump with decontamination fluids. The Air Force is responsible for the disposal of these materials, which are derived from ongoing remedial/removal actions and are staged here temporarily.
- Based on updated VSIs (October – November 2003), all drums containing drill cuttings were removed from B1403 by the AFRPA and moved to B1197. No changes in hazardous materials storage conditions were observed at B1197.

#### **4.2.3 Installation Restoration Program (IRP)**

Two groundwater IRP sites (one plume) and 196 SCOU soil IRP sites are located within the Consolidated Parcels. A total of 110 IRP sites in the Consolidated Parcels are designated NFA and 30 IRP sites are designated PHO in the SCOU ROD 1. The PHO sites are subject to RCRA Subtitle I and the authorized California UST program requirements, as stated in

the SCOU ROD 1 (Section VI, 8.0). A total of 52 IRP sites in the Consolidated Parcels are listed as NFA or require remedial action in the SCOU ROD 2. The SCOU ROD 1 NFA—no action and SCOU ROD 2 NFA sites in all parcels are listed in [Tables 4.2 and 4.3](#), respectively (both tables are attached). One site (Earth Technology Corporation [ETC]-8) in the Consolidated Parcels has been moved to the SCOU ROD 3. Three landfill sites in the Consolidated Parcels are now listed in the SCOU ROD 3. [Figures 2 and 3](#) show all IRP sites in the Consolidated and adjacent Parcels by ECC classification.

#### **4.2.3.1 IRP Groundwater Sites**

The groundwater beneath a major portion of the Consolidated Parcels has been contaminated by migration of the Main Base trichloroethene (TCE) plume from suspected multiple sources on Parcels A, B2 and F1. On Parcels F2, G4 and L, groundwater contamination levels are below cleanup levels. The cleanup level for TCE in groundwater is the State and Federal maximum contaminant level (MCL) of 5.0 micrograms per liter [ $\mu\text{g/L}$ ]. Groundwater is approximately 65 feet below ground surface (bgs). For remedial purposes under CERCLA, this TCE plume (Main Base Plume) consists of Operable Units named OU-1 (also known as IRP Site OT029) and OU-2 (also known as IRP Site OT030). The Air Force has completed an investigation of the plume and has implemented response action for OU-1 and OU-2 under its IRP. The Air Force has determined that the groundwater treatment system is operating properly and successfully within the Consolidated Parcels, as described in the OPS— Final dated February 2004.

The original OU-1 treatment system has been in operation since May 1994 under the *Record of Decision—Interim, Operable Unit No. 1, Castle Air Force Base* (OU-1 Interim ROD) (USAF, 1997b), which has since been superceded by the CB ROD—Part 1 for groundwater. The OU-1 treatment system was shut down in May 2003, after achieving its design goal of “hot spot” removal. The OU-2 extraction and treatment system has been in operation since November 1996 under the OU-2 Final Groundwater ROD, which has since been superceded by the CB ROD—Part 1. The Phase 2 system, which was renamed the Phase 3 system (May 2000) after its treatment capacity was expanded, was constructed under the CB ROD—Part 1. Extraction wells, injection wells, buried system pipelines and/or monitoring wells associated with the systems are located within the Consolidated Parcels (September 1997). In addition, five wellhead treatment systems are currently removing TCE from isolated areas of the groundwater plume in the Consolidated Parcels. [Figures 2 and 3](#)

show the groundwater TCE plume area extent, the treatment plant locations, extraction/injection wells and system pipelines.

The CB ROD–Part 1 also identified annual monitoring and evaluation in the remedy for two smaller groundwater contaminant plume areas (Landfill [LF]-4 Plume, LF-1 Plume) located within the Consolidated Parcels. In both of these areas the size of the plume and the levels of TCE contamination were not sufficient to warrant active remediation. However, the remedy specified that annual monitoring and evaluation be performed until such time as pump and treat remediation was warranted (based on criteria specified in the ROD) or groundwater contamination did not exceed the MCL for a period of one year, thereby warranting no further action. As documented in the Long-Term Groundwater Sampling Program 2001 Annual Report (Jacobs, 2002a), the LF-1 plume area has satisfied the no further action criteria and is no longer monitored. The LF-4 plume area is still monitored as it has not yet warranted active remediation or discontinuation of annual monitoring and evaluation. The maximum TCE concentration in the LF-4 plume was 10 µg/L (monitoring well [MW]400) in September 2003. Monitoring and evaluation of the LF-4 plume area will continue in accordance with requirements of the CB ROD–Part 1.

TCE is the primary COC in the groundwater beneath the Consolidated Parcels. Progress of groundwater cleanup is being monitored regularly under the Air Force's Long-Term Groundwater Sampling Program (LTGSP) and reported semiannually. Data in the LTGSP 2003 Annual Report indicates that the groundwater beneath the Consolidated Parcels is currently contaminated with a maximum TCE concentration of 99 µg/L. Monitoring wells upgradient of Parcel A are currently contaminated with up to 10 µg/L of TCE, and downgradient monitoring wells in adjacent properties are currently contaminated with up to 13 µg/L of TCE. Within the Consolidated Parcels, TCE concentrations have generally decreased over the past eight years from a high of 150 µg/L in 1995 to current levels of less than 100 µg/L. Within each hydrostratigraphic zone, the TCE plume mass has been reduced by approximately 40 to 70 percent. The LTGSP 2003 Annual Report contains maps showing the locations of 300 groundwater monitoring wells (current and abandoned) within the Consolidated Parcels, as well as TCE plume contours for each hydrostratigraphic zone.

### 4.3 IRP SOIL SITES BY PARCEL

The IRP soil sites in each parcel are identified and discussed in this section. Various types of remedial actions, including remedial and corrective actions, were performed at these sites. For clarification, removal actions are remedial measures taken at CERCLA sites prior to selection of a final remedy in the ROD, while corrective actions are remedial measures taken at non-CERCLA sites (RCRA, state UST, etc.). Selected alternatives in an approved ROD are termed remedial actions.

#### 4.3.1 Parcel A IRP Sites

The Parcel A IRP sites (CERCLA and PHO) are listed in Table 4-1. This list includes sites in various phases of remedial action in categories ECC 2 through ECC 5 (except ECC 3 [NFA–no action] sites which are listed separately in [Table 4-2](#)). Table 4-1 is organized by ECC classification and sites are grouped by remedial action status within each ECC classification. Details of remedial actions and closure status for the Parcel A sites are provided in the following subsections.

<b>Table 4-1 Parcel A IRP Sites</b>				
<b>IRP Site</b>	<b>Name</b>	<b>Location</b>	<b>Contaminants of Concern</b>	<b>Remedial Action</b>
<b>SCOU ROD 2 No Further Action–Exempt Sites/ECC 2</b>				
STA-33	Stained Area	Aircraft taxiway	PAH	None-CERCLA; NFA
STA-34	Stained Area	Aircraft taxiway	PAH	None-CERCLA; NFA
STA-35	Stained Area	Aircraft taxiway	PAH	None-CERCLA; NFA
STA-36	Stained Area	Aircraft taxiway	PAH	None-CERCLA; NFA
STA-37	Stained Area	Aircraft taxiway	PAH	None-CERCLA; NFA
STA-38	Stained Area	Aircraft taxiway	PAH	None-CERCLA; NFA
STA-39	Stained Area	Aircraft taxiway	PAH	None-CERCLA; NFA
STA-40	Stained Area	Aircraft taxiway	PAH	None-CERCLA; NFA
STA-41	Stained Area	Aircraft taxiway	PAH	None-CERCLA; NFA
STA-42	Stained Area	Aircraft taxiway	PAH	None-CERCLA; NFA
STA-43	Stained Area	Aircraft taxiway	PAH	None-CERCLA; NFA
STA-44	Stained Area	Aircraft taxiway	PAH	None-CERCLA; NFA
<b>SCOU ROD 1 Petroleum Hydrocarbon-Only Sites/ECC 2 No Further Action–Response Complete Sites</b>				
SS060	B79	PFFA Building 79	Fuels	Excavation completed
SS063	B175	Building 175	Hydraulic fluid	Further investigation completed

**Table 4-1  
Parcel A IRP Sites**

<b>IRP Site</b>	<b>Name</b>	<b>Location</b>	<b>Contaminants of Concern</b>	<b>Remedial Action</b>
SS064	B325	Building 325 Vehicle Shop	Used oils, waste solvents, paint thinners, spent acid, batteries, aerosols	UST and 3 OWS removed and closed. START process completed. SWMU 4.10 excavation completion closes site.
SS071	B909	PFFA Building 909	TEPH, TVPH, PAH	Further investigation completed
SS091	B1560	Building 1560	Fuels	Bioventing completed
FT003	FTA-3	Fire Training Area 3	Fuels	Excavation completed
SS017	FS-1	Flightline Fuel Spill	Fuels	SVE completed
SS018	FS-2	Flightline Fuel Spill	Fuels	SVE completed
<b>SCOU ROD 1 Petroleum Hydrocarbon-Only Sites/ECC 2 Corrective Action In Progress Sites</b>				
SS056	B59	Building 59	TEPH, TVPH, SVOC, used oil	Excavation complete; further closure sampling planned
SS065	B508 **	PFFA Building 508	TEPH, TVPH, BTEX	SVE in progress
SS072	B917 **	PFFA Building 917	TEPH, TVPH, BTEX, herbicides-insecticides	SVE in progress
SS102	B950 *	TCC-1 Building 950	TEPH, TVPH	SVE in progress
SS103	B951*	TCC-1 Building 951	TEPH, TVPH	SVE in progress
SS081	B1324	Building 1324	TVPH	SVE in progress; excavation planned
SS082	B1325/ HWS-3	Building 1325	TEPH, TVPH, used oil, hydraulic fluid	SVE in progress
SD009	DA-1/TCC-1 *	Disposal Area 1, TCC-1	JP-4, hydraulic fluid, oils	SVE in progress
SD015	DA-7 **	Disposal Area 7, PFFA	Fuels, pesticides	SVE in progress
SS184	ETC-4	Near ST-T61, HWS-1	TEPH, TVPH, BTEX, PAH	IR in progress; SVE planned
SS112	FS-3	Flightline Fuel Spill	JP-4, TEHP, TVPH	SVE in progress
SS019	FS-4	Flightline Fuel Spill	Fuels, JP-4	SVE in progress
ST035	JP-4	Flightline Pipeline Leaks	TEPH, TVPH	SVE in progress
NA	JP-7	Northeast of Building 1269	Fuels	Excavation completed; SVE in progress
SS033	PFFA **	Bulk Fuels, Oils and Lubricants Facility	TEPH, TVPH, BTEX, oils, lubricants	SVE in progress
WP043	SS-8 **	PFFA Sewer	TEPH, TVPH, BTEX	SVE in progress
SS057	ST-T61/ HWS 1	North of Building 65	TEPH, TVPH, BTEX, PAH	IR in progress; SVE planned
SS021	UFL-2	Near Building 1253	TEPH, TVPH, BTEX	SVE in progress
SS046	UFL-3	Near Building 1354	TEPH, TVPH, BTEX	SVE in progress

**Table 4-1  
Parcel A IRP Sites**

IRP Site	Name	Location	Contaminants of Concern	Remedial Action
<b>SCOUD ROD 1 No Further Action–Response Complete Sites/ECC 4</b>				
DP028	DP 4A/4B	Landfill 2	Possible hazardous waste	Excavation completed
LF004	Landfill 2	Southeast on parcel	Possible hazardous waste	Excavation completed
SD010	DA-2	Flightline	TEPH, TVPH, lead	Excavation completed
SD016	DA-8	Building 1550	TCE, fuels	SVE and excavation completed
SS085	B1344	Fire Station	PAH, lead	Excavation completed
SS090	B1550	Building 1550	Fuels	SVE and excavation completed
SS201	SWMU 4.9	Building 325 OWS	Fuels, solvents, metals	Removal and excavation completed
SS202	SWMU 4.10	Building 325 OWS	Fuels, solvents, metals	Removal and excavation completed
SS203	SWMU 4.11	Building 325 OWS	Fuels, solvents, metals	Removal and excavation completed
SS205	SWMU 4.13	Building 508 OWS	Fuels, solvents, metals	Removal and excavation completed
WP041	SS-6	Building 1550	TCE, fuels	SVE and excavation completed
WP042	SS-7	Building 1550	TCE, fuels	SVE and excavation completed
<b>SCOUD ROD 2 No Further Action–Response Complete Sites/ECC4</b>				
SS088	B1532	Building 1532	TCE, <i>cis</i> -1,2-DCE	Pilot study completed
SS089	B1541	Hangar 1541	TVPH, TEPH, VOCs	Excavation completed
SD197	SWMU 4.5	Building 79 OWS	TVPH, TEPH, BTEX, PAHs	Removal and excavation completed
SD199	SWMU 4.7	Building 175 OWS	Hydraulic fluid	Removal and excavation completed
SD200	SWMU 4.8	Building 175 OWS	Hydraulic fluid, Freon	Removal and excavation completed
SD207	SWMU 4.15	Building 929 OWS	Grease, oils, fuels	Removal and excavation completed
SD209	SWMU 4.17	Building 1260 OWS	Waste oil and fuels	Removal and excavation completed
SD209	SWMU 4.18	Building 1260 OWS	Solvents, PAHs	Removal and excavation completed
SD215	SWMU 4.23	Building 1541 OWS	TVPH	Removal and excavation completed
SD221	SWMU 4.29	Building 1260 HWS	Hazardous waste	Closure sampling completed
SS169	F-4	Hangar F-4	TCE, PCE	SVE completed; closure report approved

<b>Table 4-1 Parcel A IRP Sites</b>				
<b>IRP Site</b>	<b>Name</b>	<b>Location</b>	<b>Contaminants of Concern</b>	<b>Remedial Action</b>
<b>SCOUD ROD 2 Remedial Action In Progress Sites/ECC 4</b>				
SD196	SWMU 4.4	Building 59 OWS	TVPH, TEPH	OWS removal, excavation and closure sampling completed; closure report submitted
SD198	SWMU 4.6	Building 88 OWS (1 of 2 OWS remains)	Fuels, oils, hydraulic fluids, detergents, solvents	OWS removal, excavation and closure sampling completed; closure report submitted
SD208	SWMU 4.16	Building 956 OWS	JP-4, oils, hydraulic fluid	OWS removal, excavation and closure sampling completed; closure report submitted
SD214	SWMU 4.22	Structure 1571 OWS	Fuel, SVOCs	OWS removal, excavation and closure sampling completed; closure report submitted
<b>SCOUD ROD 3 Remedial Action in Progress Sites/ECC 4</b>				
LF007	LF-4	Landfill 4	Refuse, fuels, possible hazardous waste	Consolidation and Capping, Maintenance and Monitoring, Institutional Controls; OPS
DP106	DP-5	Landfill 4 Disposal Pit 5	Refuse, fuels, possible hazardous waste	Consolidation and Capping, Maintenance and Monitoring, Institutional Controls; OPS
DP107	DP-6	Landfill 4 Disposal Pit 6	Refuse, fuels, possible hazardous waste	Consolidation and Capping, Maintenance and Monitoring, Institutional Controls; OPS
<b>SCOUD RODS 2 and 3 Remedial Action Sites/ECC 5</b>				
SS188	ETC-8	Near former Buildings 1211, 1212 and 1213	PAHs	Excavation completed; further excavation planned.
SD195	SWMU 4.3	Building 1521 AST	Fuels, waste oil	Removal and excavation completed; bioventing system planned
SD213	SWMU 4.21	Building 1523 OWS and AST	Fuels	Removal and excavation completed; bioventing and further closure sampling planned
—	B51/B54	B51/B54 Group	TCE	SVE in progress
—	DA-5	Near B1528	TCE, fuels	SVE in progress
SD012	DA-4	Near Building 1314	TCE	SVE pilot study completed; excavation planned
SS110	B1314	Building 1314	TCE	SVE pilot study completed; excavation planned
SS086	B1350	Building 1350	TCE, PCE, TVPH	SVE in progress
WP037	SS-2	Sewer Segment 2	TCE	SVE pilot study completed; closure report submitted
<b>Notes</b>				
* Sites in TCC-1 Group that share a single SVE system				
** Sites in PFFA Group that share a single SVE system				

A portion of Parcel A is inside the groundwater TCE plume boundary and classified as ECC 4 (groundwater remediation is operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

#### **4.3.1.1 ECC 2 Sites**

The 12 IRP sites (NFA–exempt) at jet blast stains on aircraft taxiways (STA-33 through STA-44), located within Parcel A and presented in [Tables 4-1](#) and [4-3](#), are listed as CERCLA exempt (petroleum exclusion) in the SCOU ROD 2. With respect to CERCLA, they are NFA sites and classified as ECC 2. No removal/corrective actions were performed at these sites under any non-CERCLA programs. These exempt sites are shown on [Figure 2](#) as PHO sites.

The following eight sites (NFA–response completed) listed in [Table 4-1](#) are designated as PHO in SCOU ROD 1 and all remedial actions have been completed. These sites have been closed by the RWQCB as evidenced by approval letters. These sites are classified as ECC 2. Completed remedial actions for the PHO sites are discussed in the following text.

At Building 79 (B79) after the OWS (SWMU 4.5) was removed, a removal action by excavation was completed. Petroleum, oils, and lubricants were removed from wastewater at this site. The closure report is titled “*Closure Report for Building 79 and SWMU 4.5 Petroleum, Oils, and Lubricants, Fuel Farm Area (PFFA) Associated Sites,*” dated December 2002. The site was closed by an RWQCB letter dated 24 April 2003 and DTSC letter dated 7 February 2003.

At Building 175 (B175), two OWS (SWMU 4.7 and 4.8) were removed in 1996 (SWMU 4.8 was partially removed and abandoned in place) and an interim removal action by excavation was completed. The COCs were oils, hydraulic fluid, jet fuel and solvents associated with SWMU 4.7 and SWMU 4.8 operations. Additional closure soil samples were collected in 2001 and analyzed for TVPH, TEPH, VOCs, SVOCs and metals. The closure report is titled “*Final Closure Report, IRP Site B175,*” dated September 2002. The site was closed by an RWQCB letter dated 14 January 2003.

At Building 325 (B325), three OWSs (SWMU 4.9, SWMU 4.10 and SWMU 4.11) and a UST were removed. At OWS site SWMU 4.10, additional fuel contaminated soils were removed. The removal actions at the three OWSs are completed and they are NFA in SCOU ROD 1.

The UST site was closed by an RWQCB letter dated 4 November 1997. The excavation at the SWMU 4.10 OWS removed all fuel contaminated soil identified in the SCOU RI/FS. The B325 site is free of known fuel contaminated soils and Jacobs Project Note #164, *“Implementation of Soil Vapor Extraction at Building 325”* (Jacobs, 2000c), closed the site with respect to TCE contamination at depth.

At Building 909 (B909), further investigation indicated that no further action was needed. The site was designated NFA and no sampling was performed. The Closure Report is titled *“Closure Report for Building 909 Petroleum, Oils, and Lubricants, Fuel Farm Area (PFFA) Associated Site,”* dated November 2002. The Site was closed by an RWQCB letter dated 23 December 2002.

At Building 1560 (B1560), a diesel UST removal in 1994 and an interim removal action by excavation followed by bioventing in 1999 was completed. The COCs were fuels from the leaking UST. During the SCOU RI/FS, soil samples were collected and found to contain TVPH above the RAO. However, TEPH was less than the RAO in samples collected in 1999 prior to bioventing. The Closure Report is titled *“Closure Report, Former UST Location Buildings 1560 and 789”* dated July 2002. The site was closed by an RWQCB letter dated 23 December 2002.

At the Fire Training Area-3 (FTA-3) an interim removal action by excavation was completed. Waste fuels and solvents were burned at this site. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals after the sump was removed. The closure report is titled *“Closure Report for FTA-3, B551, and SWMUs 4.7, 4.8 and 4.14”* dated 28 September 2001. The site was closed by an RWQCB letter dated 4 January 2002.

At Fuel Spill One (FS-1) an interim removal action by SVE was completed. Aviation jet fuel (JP-4) was pumped and distributed at this site. The closure report is titled *“Fuel Spill 1 (FS-1) Closure Report,”* dated December 2000. The site was closed by an RWQCB letter dated 11 July 2000.

At Fuel Spill Two (FS-2) an interim removal action by SVE was completed. Aviation jet fuel (JP-4) was pumped and distributed at this site. The closure report is titled *“FS-2 Closure Report,”* dated June 1999. The site was closed by an RWQCB letter dated 23 August 1999.

The following 19 sites (corrective action in progress) presented in [Table 4-1](#) are designated as PHO in the SCOU ROD 1 and are in a corrective action phase. These sites are classified as ECC 2. Corrective actions in progress for the PHO sites are discussed in the following text.

Site closure at the 19 sites listed in [Table 4-1](#) will occur when closure, annual or periodic performance soil boring samples indicate that fuel contamination is below specified levels within designated depth zones. Soil boring samples are preferentially collected from the known most contaminated locations. Based on these soil boring samples, vadose zone modeling can also be used to close the site by proving that existing residual contamination levels are protective of groundwater quality.

At Building 59 (B59), a removal action by excavation which removed an OWS (SWMU 4.4) has been completed. Oils, fuels and soaps were removed from wastewater at this site and fuels leaked from the OWS. All visible contamination was removed during excavation. Further soil boring sampling is required to meet new RCRA requirements. Closure sampling for petroleum contamination was completed in 2004 and the closure report has been submitted for regulatory approval.

At the Petroleum Fuel Farm Area (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 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 BTEX compounds are being removed by the SVE system. Site closure is expected in 2006.

At Discharge Area-1/Test Center Complex-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 Building 1324 (B1324), a corrective action (continuation of the original removal action) by intrinsic remediation is in progress which is monitored with annual soil gas samples. 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) was implemented in April 2004 to achieve timely closure. Additional site excavation is also planned in 2004. Site closure is expected in 2005.

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

At Structure T61 (ST-T61/HWS-1 and ETC-4), a corrective action (continuation of the original removal action) by intrinsic remediation is in progress which is monitored with annual soil gas samples. 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 is planned. The contamination source is former UST leaks and there is evidence of fuel migration in the soil gas. 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 piping system leaks. Site closure is expected in 2005.

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

At Jet Propulsion-7 (JP-7), an interim removal action by excavation was completed. At JP-7, two steel walled 420,000-gallon ASTs are intact and have concrete containment berms. The source of fuel contamination is former JP-7 fuel piping system leaks. Closure is documented in the "*Closure Report for CERCLA and Petroleum Hydrocarbon-Contaminated Excavation Sites*" (Jacobs, 2000d) However, TCE detected in one vapor monitoring well

was attributed to migration of soil gas contamination from the B51/B54 Group, particularly in the vicinity of B1266. JP-7 is now linked to the B51/B54 Group so that the TCE detected in soil gas can be addressed appropriately (SVE remediation).

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 Underground Fuel Leak 3 (UFL-3) a corrective action (continuation of the original removal action) by intrinsic remediation is in progress which is monitored with annual soil gas samples. The probable source of contamination is aviation jet fuel and diesel from pipeline, AST and UST leaks/surface spills. Monitoring has indicated that natural attenuation is occurring; however, a more active remediation method (SVE) was implemented in April 2004 to achieve timely closure. Site closure is expected in 2005.

#### **4.3.1.2 ECC 3 Sites**

A total of 92 sites in Parcel A are designated NFA in SCOU ROD 1. Of these no removal or remedial actions were required or occurred at 87 sites. These NFA–no action sites (ECC 3) are listed in the attached [Table 4-2](#) and shown on [Figure 2](#). These IRP sites are suitable for unrestricted use.

#### **4.3.1.3 ECC 4 Sites**

A total of 12 sites in Parcel A designated as NFA in SCOU ROD 1 are sites where removal actions have been completed and the sites have been closed by the Base Closure Team (BCT) with the approval of the United States Environmental Protection Agency (EPA), the California Department of Toxic Substances Control (DTSC) and the California Central Valley Regional Water Quality Control Board (RWQCB). The remedy at these sites was conducted as a CERCLA interim removal action. The following IRP sites, located within Parcel A and classified as ECC 4, were recommended for NFA after remedial action responses were completed, and listed as NFA in SCOU ROD 1. These NFA sites are shown in [Table 4-1](#) and on [Figure 3](#).

Similarly, there are 6 sites in Parcel A designated as NFA in SCOU ROD 2, where interim removal actions were completed and the sites closed with regulatory approval. These ECC 4 sites are listed in [Tables 4-1](#) and [4-3](#) and are shown on [Figure 3](#).

The remedial actions completed at these NFA sites are discussed below. The cleanup levels for contaminants in soil and soil gas at Castle Airport are specified in SCOU ROD 1.

At LF-2 and DP 4A/4B (LF005 and DP028) near B1596, a removal action by excavation was completed in October 1998. All refuse and contaminated soil was removed, screened for contaminants and consolidated into LF-4. The site was sampled for polychlorinated aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), semi-volatile organic compounds (SVOCs), total extractable petroleum hydrocarbons (TEPH), total volatile petroleum hydrocarbons (TVPH), volatile organic compounds (VOCs), and metals. The COCs included benzo(a)anthracene, benzo(b)fluoranthene, cadmium, and lead. The closure report is titled "*Castle Vista Landfill A and Landfill 2 Closure Report*" (Jacobs, 1999a).

At Discharge Area 2 (DA-2) on the flightline apron near B1322, a removal action by excavation was completed in August 2000. DA-2 was an aircraft support equipment washrack. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. The COCs included TEPH, TVPH, cadmium and lead. The closure report is titled "*Closure Report for CERCLA and Petroleum Hydrocarbon-Contaminated Excavation Sites*" (Jacobs, 2000d).

At Discharge Area 8 (DA-8), including B1550, Sanitary Sewer Segment (SS)-6 and SS-7, a removal action by SVE and excavation was completed and the site closed. An excavation of fuel contaminated soil under the former OWS was completed. These sites are associated with a former bomb trailer maintenance washrack which included a OWS and a UST. Solvents, oil, grease, paints, brake fluids and hydraulic fluids were discharged directly into a storm water system from these activities. The OWS was removed by the Air Combat Command. The UST (B1550) was removed and the UST site was closed by RWQCB letter dated 4 November 1997. The soil at the OWS site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. The soil gas was sampled for VOCs including TCE and *cis*-1,2-dichloroethene (*cis*-1,2-DCE). The COCs included TCE, *cis*-1,2-DCE and gasoline. The closure report is titled "*CERCLA Closure Report for VOC Contamination at Discharge Area 8/Sewer Segment 6*" (Jacobs, 2000e).

At Building 1344 (B1344), a removal action by shallow excavation was completed in August 2000. The site was sampled for TEPH, TVPH, PAHs, VOCs, SVOCs, and metals. The COCs included several PAHs and cadmium from fire truck maintenance activities. Closure is documented in the “*Closure Report for CERCLA and Petroleum Hydrocarbon-Contaminated Excavation Sites*” (Jacobs, 2000d).

At Solid Waste Management Unit 4.9 (SWMU 4.9) adjacent to B325, the OWS was removed on 28 March 1996, and the site excavated. The site was closed. The OWS was connected to floor drains in B325 which was used for vehicle maintenance, vehicle painting, battery maintenance and vehicle cleaning. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. Confirmation closure samples contained no COCs (TCE, SVOCs, fuels) above remedial cleanup levels. The closure report is titled “*Final Closure Certification Report*” (Laguna Construction Company, Inc. [Laguna], 1997).

At Solid Waste Management Unit 4.10 (SWMU 4.10) near B325, the OWS was removed in March 1996 and the site excavated. The site was further excavated and closed. The OWS was connected to a vehicle wash rack near B325. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. The COCs included TVPH and TEPH. The closure report is titled “*Site Closure Report Building 325*” dated February 1999.

At Solid Waste Management Unit 4.11 (SWMU 4.11) adjacent to B325, the OWS was removed in March 1996, and the site excavated. The site was closed. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. The COC was TEPH. Closure is documented in the “*Site Closure Report Building 325.*”

At Solid Waste Management Unit 4.13 (SWMU 4.13) at B508 in the PFFA, the OWS was removed in May 1996, the site excavated and closed. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. COCs included TEPH, cadmium, chromium, lead, nickel and zinc. Closure is documented in the “*Final Closure Certification Report.*”

The following 11 IRP sites (NFA–response complete) presented in [Table 4-1](#), located within Parcel A, were NFA after removal actions were completed. The remedies at these sites were conducted as CERCLA interim removal actions. The sites are classified as ECC 4 and are shown on [Figure 3](#). These NFA sites are suitable for unrestricted use as documented in SCOU ROD 2. The remedial actions completed at the sites are discussed below. The

cleanup levels for contaminants in soil and soil gas at Castle Airport are specified in SCOU ROD 2.

At Building 1532 (B1532), an SVE study that resulted in site closure has been completed. The SVE study sampled for VOCs in soil gas, including *cis*-1,2-DCE and TCE. The COC at B1532 was TCE in soil gas resulting from solvent usage. The closure report is "*Soil Vapor Extraction Decision Study, B1532 Closure Report*," dated January 2003. Please note that an OWS identified in previous documents, notably the SCOU RI/FS, is actually a telephone cable vault.

At Hangar 1541 (B1541) and adjacent Solid Waste Management Unit 4.23 (SWMU 4.23), the OWS was removed by the Air Combat Command and associated contaminated soils were excavated, resulting in site closure. The site was sampled for benzene, toluene, ethylbenzene and xylenes (BTEX); SVOCs; TEPH; TVPH; VOCs; and metals. The COCs at B1541 were benzene, fuels and *cis*-1,2-DCE resulting from the use of fuels and solvents at the facility. The closure report is titled "*B1541 Closure Report*," dated December 2002.

At Solid Waste Management Unit 4.5 (SWMU 4.5) at B79 in the PFFA, the OWS was removed by the Air Combat Command. The OWS removed fuels from wastewater from runoff and a vehicle washrack. Associated contaminated soils were excavated and the site was sampled for BTEX, SVOCs, TEPH, TVPH, VOCs, and metals, resulting in site closure. The COCs at SWMU 4.5 were fuels and benzene resulting from fuel storage and fuel transfer operations at the PFFA. The closure report is titled "*Closure Report for Building 79 and SWMU 4.5*," dated December 2002.

At Solid Waste Management Unit 4.7 (SWMU 4.7) adjacent to B175, the OWS was removed, then excavation and closure sampling was completed. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. No contaminants were identified in SCOU ROD 2 at levels that pose an adverse risk to human health or the environment at SWMU 4.7. The closure report is titled "*Closure Report for FTA-3, B551, and SWMUs 4.7, 4.8 and 4.14*," dated 28 September 2001. The site was closed by an RWQCB letter dated 4 January 2002.

At Solid Waste Management Unit 4.8 (SWMU 4.8) adjacent to B175, the OWS was removed, then excavation and closure sampling was completed. The site was sampled for Freon 113, SVOCs, TEPH, TVPH, VOCs and metals. No contaminants were identified in

SCOU ROD 2 at levels that pose an adverse risk to human health or the environment at SWMU 4.8. Closure is documented in the “*Closure Report for FTA-3, B551, and SWMUs 4.7, 4.8 and 4.14*” (see above).

At Solid Waste Management Unit 4.15 (SWMU 4.15) near former B929 in the former Wastewater Treatment Plant, the OWS was removed and contaminated soil was excavated. The COCs at SWMU 4.15 were fuels from PFFA operations. The site was sampled for metals, SVOCs, VOCs and TEPH. No contaminants were detected at levels that pose an adverse risk to human health or the environment. The closure report is titled “*Site Closure Summary for Solid Waste Management Unit 4.15*” (Jacobs, 2003a).

At Solid Waste Management Unit 4.17 (SWMU 4.17) adjacent to B1260, the OWS was removed, then associated contaminated soils were excavated resulting in site closure. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. No contaminants were identified in SCOU ROD 2 at levels that pose an adverse risk to human health or the environment at SWMU 4.17. Additional closure soil samples were collected and analyzed in November 2002. The closure report is titled “*Site Closure Summary for Solid Waste Management Units 4.17, 4.18, and 4.29*” (Jacobs, 2003b).

At Solid Waste Management Unit 4.18 (SWMU 4.18) adjacent to B1260, the OWS was removed, then associated contaminated soils were excavated resulting in site closure. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. The COCs at SWMU 4.18 were 1,4-dichlorobenzene and benzo(a)pyrene. Additional closure soil samples were collected and analyzed for the COCs in November 2002. Closure is documented in the “*Site Closure Summary for Solid Waste Management Units 4.17, 4.18, and 4.29*” (Jacobs, 2003b).

At Solid Waste Management Unit 4.29 (SWMU 4.29), a hazardous waste 90 day accumulation pad adjacent to B1260, additional sampling at the site confirmed no adverse risk to human health or the environment. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. No contaminants were identified in SCOU ROD 2 at levels that pose an adverse risk to human health or the environment at SWMU 4.29. Additional closure soil samples were collected and analyzed for the COCs in November 2002. Closure is documented in the “*Site Closure Summary for Solid Waste Management Units 4.17, 4.18, and 4.29*” (Jacobs, 2003b).

At Hangar F-4 (F-4), a selected remedy of SVE was identified in the SCOU ROD 2. COCs at F-4 are TCE and PCE. SVE was implemented at the F-4 site from August 2000 through May 2003 under the SVE Decision Study. A closure report titled "*Soil Vapor Extraction Decision Study, Hangar F-4 Closure Report*" was approved by the regulatory agencies in March 2004.

The following four IRP sites (remedial action in progress), located within Parcel A and listed in [Table 4-1](#), are either in the final phase of remedial action or have completed remedial action and regulatory approval of the closure reports is pending. Site closure is expected prior to property transfer. However, the property at these sites will not be transferred until the closure reports are approved by the regulatory agencies. Therefore, these sites are classified as ECC 4. The remedial actions in progress for the sites are discussed below. The cleanup levels for contaminants in soil and soil gas at Castle Airport are specified in the SCOU ROD 2.

At Solid Waste Management Unit 4.4 (SWMU 4.4), an OWS adjacent to B59 within the PFFA, a selected remedy of excavation and disposal was identified in the SCOU ROD 2. The COCs at SWMU 4.4 are fuels. The OWS was removed in 1996. The removal report was titled "*Final Closure Certification Report*" (Laguna, 1997), but residual contamination remained that required additional excavation. The site was excavated and sampled again. Additional RCRA closure sampling was completed in 2003. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. The closure report titled "*Site Closure Report for Castle Airport Solid Waste Management Unit Sites 4.16 and 4.22*," has been submitted for regulatory approval.

At Solid Waste Management Unit 4.6 (SWMU 4.6), an OWS adjacent to B88, a selected remedy of excavation and disposal was identified in the SCOU ROD 2. The COCs at SWMU 4.4 are fuels and SVOCs. One of two OWSs near B88 was removed. The removal report was titled "*Final Closure Certification Report*," (Laguna, 1997). The second OWS was removed in August 2003. The first OWS site has been resampled for SVOCs, TEPH, TVPH, VOCs and metals and confirmation samples were collected from the second OWS excavation site. The closure report titled "*Site Closure Report for Building 88 (SWMU 4.6), Castle Airport*," has been submitted for regulatory approval.

At Solid Waste Management Unit 4.16 (SWMU 4.16), an OWS near B956, a selected remedy of excavation and disposal was identified in the SCOU ROD 2. SWMU 4.16 is the OWS at B956. The COCs at SWMU 4.16 are fuels. The OWS was removed. The removal report was titled "*Final Closure Certification Report*" (Laguna, 1997). but the DTSC requested additional sampling beneath the connecting pipelines. Additional sampling was conducted. Additional RCRA closure sampling, was completed in 2003. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. The closure report titled "*Site Closure Report for Castle Airport Solid Waste Management Units 4.4, 4.16 and 4.22,*" has been submitted for regulatory agency approval.

At Solid Waste Management Unit 4.22 (SWMU 4.22), an OWS at Structure 1571 (ST-1571), a selected remedy of excavation and disposal was identified in the SCOU ROD 2. The COCs at SWMU 4.22 are fuels and SVOCs. The OWS was removed. The removal report was titled "*Final Closure Certification Report*" (Laguna, 1997), but the DTSC requested additional sampling for SVOCs. Additional sampling was conducted. Additional RCRA closure sampling was completed in 2003. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. The closure report titled "*Site Closure Report for Castle Airport Solid Waste Management Units 4.4, 4.16 and 4.22,*" has been submitted for regulatory agency approval.

At the three Landfill IRP sites (remedial action in progress) listed in [Table 4-1](#), the presumptive remedy is an engineered landfill cap. The landfill cap was constructed as an interim remedial action and is completed. The landfill is currently monitored for releases to groundwater and cap integrity. The SCOU ROD 3 describes the institutional controls and monitoring requirements. These sites are classified as ECC 4 because the remedy is operating properly and successfully. The remedial action for the sites are discussed below. The cleanup levels for contaminants in soil and soil gas at Castle are specified in the SCOU ROD 3.

At Landfill 4 (LF-4), including Disposal Pits 5 and 6 (DP-5, DP-6), a selected remedy of consolidation and capping, long-term maintenance and monitoring and institutional controls was identified in the SCOU ROD 3. COCs at the sites include 1,2-DCA and Freon 12. In addition, the sites are subject to the applicable state and federal landfill closure requirements. In accordance with a Removal Action Memorandum dated September 1997, the sites were consolidated and capped during the period from October 1997 through

September 1999. Closure of LF-4 and associated sites is documented in the agency-approved closure report titled “*Landfill 4 and Landfill 5 Closure Report*” (Jacobs, 2003c). Since completion of the consolidation and capping, the LF-4 sites have been maintained and monitored pursuant to the agency-approved plan titled “*Closure and Post-Closure Maintenance Plan for Castle AFB Landfills*” (Jacobs, 1997b). Long-term maintenance and monitoring of the LF-4 sites is required for 30 years (year 2029) or until such time as it can be demonstrated that there is no longer a threat to water quality from the waste remaining in place. All institutional controls, with the exception of the restrictive land use covenants that will be applied at the time of land transfer, have been implemented for the LF-4 sites.

#### **4.3.1.4 ECC 5 Sites**

The nine remedial action sites in Parcel A listed in [Table 4-1](#) are in a remedial action phase and designated as ECC 5.

This property will be retained by the Air Force until soil remediation is completed and the closure reports are approved. The excluded property is discussed in the County Parcels FOST. This property will be transferred in a separate deed and will require separate SBEBS and FOST to demonstrate the site reclassification as ECC 4.

The remedial actions ongoing and/or planned for these sites are discussed in the following text.

One site, ETC-8 in Parcel A, will be addressed in the upcoming SCOU ROD 3. A removal action (excavation and disposal) to remove PAH-contaminated soil was performed at ETC-8, but was incomplete and additional remediation may be required. Further excavation and off-site disposal is the preferred alternative in the Draft *Comprehensive Basewide Proposed Plan—Part 2* (Jacobs, 2003d). This site is classified as ECC 5 and will be excluded from the property transfer until the remedial action is completed and the site is closed.

At Solid Waste Management Unit 4.3 (SWMU 4.3), two ASTs adjacent to B1521, a selected remedy of excavation and disposal and bioventing was identified in the SCOU ROD 2. SWMU 4.3 includes two ASTs (8,000 and 10,000-gallon) that received waste oil from the OWS that is SWMU 4.21. The COCs at SWMU 4.3 are fuels. The tanks were removed and an initial excavation was conducted. An excavation and disposal action was completed at SWMU 4.3 in 2002. However, due to the contamination located under structurally sensitive

and critical utility lines, bioventing was included in the selected remedy to complete the cleanup. The site has been sampled for SVOCs, TEPH, TVPH, VOCs and metals. Only TEPH and TVPH are at levels that pose an adverse risk to human health or the environment. Bioventing of the site is planned for 2004 and expected to lead to closure. Due to its association with DA-5, SWMU 4.3 will not be transferred until the DA-5 site is closed.

At Solid Waste Management Unit 4.21 (SWMU 4.21), an AST and OWS near B1523, a selected remedy of excavation and disposal and bioventing was identified in the SCOU ROD 2. SWMU 4.21 is an OWS located at the DA-5 site area. The COCs at SWMU 4.21 are fuels. An OWS removal, excavation and disposal action were completed at SWMU 4.21 in 2002. However, due to the depth of contamination encountered, bioventing was included in the selected remedy to complete the cleanup. The site has been sampled for SVOCs, TEPH, TVPH, VOCs and metals. Only TEPH and TVPH are present at levels that pose an adverse risk to human health or the environment. Bioventing of the site is planned for 2004 and expected to lead to closure. However, due to its association with DA-5, SWMU 4.21 will not be transferred until the DA-5 site is closed.

The Building 51 and Building 54 (B51/B54) group of sites consists of Buildings 51 (Parcel C2b), 52, 53, 54, 1253, 1260, 1266, Structures ST55, T66, T67, Storage Area (SA)-B3, SS-4 and site parking area ETC-5. B52 was demolished by the Air Combat Command prior to the construction in 1990 of the B317 dormitory. COCs at the B51/B54 group of sites include benzene; carbon tetrachloride; 1,1-dichloroethene (1,1-DCE); *cis*-1,2-DCE; fuels; PCE and TCE. The selected remedy documented in the SCOU ROD 2 is SVE. Pursuant to Removal Action Memoranda dated April 2000 and May 2001, respectively, for the B54 and B51 group areas, SVE is in progress at these sites. As specified in the SCOU ROD 2, B51/54 group site property will not be transferred prior to completion of SVE with an approved closure report, unless suitable institutional controls are implemented for the protection of tenants and the operating SVE system. When TCE remediation is completed and the closure report approved, the property will be transferred in a separate deed.

At Discharge Area 5 (DA-5), a selected remedy of SVE and excavation was identified in the SCOU ROD 2. COCs at DA-5 are fuels, benzo(a)pyrene, cadmium, 1,2-dibromo-3-chloropropane and methylene chloride. In accordance with a Removal Action memorandum

dated June 2001, SVE has been operating at the site from October 2001 to date. Excavation will be used to remediate remaining shallow fuel contamination that may remain after SVE is completed. As specified in the SCOU ROD 2, DA-5 site property will not be transferred prior to completion of SVE with an approved closure report, unless suitable institutional controls are implemented for the protection of tenants and the operating SVE system. When TCE/TVPH remediation is completed and the closure report is approved, the property will be transferred in a separate deed.

At Discharge Area 4 (DA-4), including the associated B1314, a selected remedy of SVE and excavation was identified in the SCOU ROD 2. The COC at the sites is TCE. In accordance with a Removal Action Memorandum dated September 1995, SVE was implemented at the site August 1996 through January 1997, and then reinitiated from November 2001 through May 2002. Former B1314 was removed. Due to recalcitrant contamination located under a shallow concrete box at the site, excavation of the remaining contamination is planned in 2004.

At Building 1350 (B1350), a selected remedy of SVE was identified in the SCOU ROD 2. COCs at B1350 include PCE, TCE and TVPH. Prior to completion of the SCOU ROD 2, hydrocarbon contamination associated with a leaking UST was cleaned up and closed. The UST closure report was titled "*Final Closure Certification Report*" (Laguna, 1997). In accordance with a Removal Action Memorandum dated June 2001, SVE has been operating at the site from October 2001. A rebound study is currently in progress (April 2004).

At Sewer Segment 2 (SS-2), a selected remedy of SVE was identified in the SCOU ROD 2. COCs at SS-2 are *cis*-1,2-DCE and TCE. SVE was implemented at the site from August 2002 through May 2003 under the SVE Decision Study. A closure report titled "*Soil Vapor Extraction Decision Study, Sewer Segment 2 Closure Report*" was submitted in 2003 and regulatory approval is pending.

#### **4.3.2 Parcel C1 IRP Sites**

There are no SCOU IRP sites in Parcel C1. A portion of Parcel C1 is inside the groundwater TCE plume boundary and classified as ECC 4 (groundwater remediation is operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

### 4.3.3 Parcel C2a IRP Sites

There are no SCOU IRP sites in Parcel C2a. A portion of Parcel C2a is inside the groundwater TCE plume boundary and classified as ECC 4 (groundwater remediation is operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

### 4.3.4 Parcel C2b IRP Sites

Only ECC 5 site B51 is located in Parcel C2b. The site is included in the B51/B54 Group, which is listed in [Table 4-1](#) and discussed in [Section 4.3.1.4](#). A portion of Parcel C2b is inside the groundwater TCE plume boundary and classified as ECC 4 (groundwater remediation is operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

### 4.3.5 Parcel E IRP Sites

The following two sites were designated as NFA—No Action sites in SCOU ROD 1 and are classified as ECC 3:

- B1182
- SWMU 4.24

Information about these sites is presented in attached [Table 4-2](#). A portion of Parcel E is inside the groundwater TCE plume boundary and classified as ECC 4 (groundwater remediation is operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

### 4.3.6 Parcel F1 IRP Sites

The remedial action status and ECC classification of IRP sites in Parcel F1 are listed in [Table 4-4](#). A portion of Parcel F1 is inside the groundwater TCE plume boundary and classified as ECC 4 (groundwater remediation is operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

<b>IRP Site</b>	<b>Name</b>	<b>Location</b>	<b>Contaminants of Concern</b>	<b>Removal/ Corrective Action</b>	<b>ECC Classification</b>
SS069	B551/B554	Building 551, 554	Oils, spent solvents	Excavation completed	ECC 2
SS027	PCB-8	Building 360	PCBs	NFA	ECC 3
SS024	PCB-5	Building 404	PCBs	Excavation completed	ECC 4
SD206	SWMU 4.14	Building 551 OWS	Fuels, oils	Removal and excavation completed	ECC 4
—	B52	B51/B54 Group	TCE	SVE in progress	ECC 5

Information on the ECC 3 site is presented in attached [Table 4-2](#). The remedial/corrective actions completed at the ECC 2 and ECC 4 sites in Table 4-4 are discussed below. The remedial action in progress at the ECC 5 site B52 is discussed for the B51/B54 Group ([Section 4.3.1.4](#)).

At Building 551/554 (B551/B554), after the OWS (SWMU 4.14) was removed in 1996, an interim removal action by excavation was then completed and confirmation soils samples were collected. The COCs were fuels, oils, detergents, paints and solvents associated with SWMU 4.14 operations. Additional closure soil samples were collected in 2001 and analyzed for SVOCs, TEPH, TVPH, VOCs and metals. The closure report is titled “*Closure Report for FTA-3, B551, and SWMUs 4.7, 4.8 and 4.14,*” dated 28 September 2001. The site was closed by an RWQCB letter dated 4 January 2002.

At Polychlorinated Biphenyl site 5 (PCB-5) near former B404 in Parcel F1, a removal action by shallow excavation was completed in November 2002. The COC at PCB-5 was PCBs in soil resulting from a transformer leak. Closure is documented in the “*Removal Action and Investigation Summary for PCB Sites 4, 5 and 6*” (Jacobs, 2003e).

At Solid Waste Management Unit 4.14 (SWMU 4.14) adjacent to B551 in Parcel F1, the OWS was removed, then excavation and closure sampling was completed. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. No contaminants were identified in SCOU ROD 2 at levels that pose an adverse risk to human health or the environment at SWMU 4.14. Closure is documented in the “*Closure Report for FTA-3, B551, and SWMUs 4.7, 4.8 and 4.14,*” dated 28 September 2001. The site was closed by an RWQCB letter dated 4 January 2002.

#### 4.3.7 Parcel F2 IRP Sites

The removal action status and ECC classification of IRP sites in Parcel F2 are listed in Table 4-5. Parcel F2 is located outside the groundwater TCE plume boundary.

Table 4-5 Parcel F2 IRP Sites					
IRP Site	Name	Location	Contaminants of Concern	Removal Action	ECC Classification
WP172	LG-1	Evaporation lagoon	None	NFA	ECC 3
SS163	SA-B2	Storage Area B2	Unknown	NFA	ECC 3
SS070	B871	Building 871	PCBs, TEPH, DDE, DDT	Excavation completed	ECC 4
SS182	ETC-2	Northeast on parcel	PAH, LEAD	Excavation completed	ECC 4

Information on the ECC 3 sites is presented in attached [Table 4-2](#). The remedial actions completed at the ECC 4 sites in Table 4-5 are discussed below.

At Building 871 (B871), a removal action by shallow excavation in four separate locations was completed in March 1996. The site was sampled for TEPH, TVPH, PCBs, PAHs, VOCs, SVOCs, pesticides and metals. The COCs included PCBs, TEPH and pesticides from a former DRMO yard. The closure report is titled “*Technical Report, Removal Action at Building 871*” (Jacobs, 1996) and was approved by regulatory agencies.

At ETC-2, a removal action by shallow excavation was completed in August 2000. The site was sampled for TEPH, TVPH, PAHs, VOCs, SVOCs, and metals. The COCs included several PAHs and lead at a former skeet range. Closure is documented in the “*Closure Report for CERCLA and Petroleum Hydrocarbon-Contaminated Excavation Sites*” (Jacobs, 2000d).

#### 4.3.8 Parcel F3 IRP Sites

The removal action status and ECC classification of IRP sites in Parcel F3 are listed in [Table 4-6](#). A portion of Parcel F3 is inside the groundwater TCE plume boundary and classified as ECC 4 (groundwater remediation is operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

Table 4-6 Parcel F3 IRP Sites					
IRP Site	Name	Location	Contaminants of Concern	Removal Action	ECC Classification
SS023	PCB-4	Building 534	PCBs	Excavation completed	ECC 4

The remedial actions completed at the ECC 4 site in Table 4-6 are discussed below.

At Polychlorinated Biphenyl site 4 (PCB-4) near B534, a removal action by shallow excavation was completed in November 2002. The COC at PCB-4 was PCBs in soil resulting from a transformer leak. The closure report is titled “*Removal Action and Investigation Summary for PCB Sites 4, 5 and 6*” (Jacobs, 2003e).

#### 4.3.9 Parcel G1DK IRP Sites

The remedial action status and ECC classification of IRP sites in Parcel G1DK are listed in Table 4-7. A portion of Parcel G1DK is inside the groundwater TCE plume boundary and classified as ECC 4 (groundwater remediation is operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

Table 4-7 Parcel G1DK IRP Sites					
IRP Site	Name	Location	Contaminants of Concern	Removal Action	ECC Classification
SS048	PCB-9	Building 1213	PCB, Aroclor 1260	Excavation completed	ECC 4

The remedial actions completed at the ECC 4 sites in Table 4-7 are discussed below.

At Polychlorinated Biphenyl Site 9 (PCB-9) at B1213, a removal action by excavation was completed in February 1998. The site was sampled for PCBs, pesticides and metals. The COCs included PCBs from a transformer leak, and the pesticides alpha-chlordane, gamma-chlordane, DDE, DDT and heptachlor epoxide, which were used in the area. The closure report is titled “*PCB-9 Closure Report*” (Jacobs, 1998b).

#### 4.3.10 Parcel G2 IRP Sites

The remedial action status and ECC classification of IRP sites in Parcel G2 are listed in [Table 4-8](#). A portion of Parcel G2 is inside the groundwater TCE plume boundary and

classified as ECC 4 (groundwater remediation is operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

<b>Table 4-8 Parcel G2 IRP Sites</b>					
<b>IRP Site</b>	<b>Name</b>	<b>Location</b>	<b>Contaminants of Concern</b>	<b>Removal Action</b>	<b>ECC Classification</b>
NA	H4	Part of UFL-1	TEPH/TVPH	IR in progress; bioventing planned	ECC2
SS020	UFL-1	Near Building 708	TEPH/TVPH	IR in progress; bioventing planned	ECC 2
SS066	B541	Building 541	Asbestos	NFA	ECC 3
SS067	B545	Building 545	Fuels	NFA	ECC 3
SS068	B547	Building 547	Fuels, solvents, paints	NFA	ECC 3
SS186	ETC-6	Former gas station S706	None	NFA	ECC 3

Information on the ECC 3 sites is presented in attached [Table 4-2](#). The corrective actions in progress at the ECC 2 sites in Table 4-8 are discussed below.

At Underground Fuel Leak-1 (UFL-1/H-4) a corrective action (continuation of the original removal action) by intrinsic remediation is in progress, which is monitored with annual soil gas samples. UFL-1/H-4 is the site of a former gas station. The COCs 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 (SVE) was implemented in 2004 to achieve timely closure. Site closure is expected in 2005.

#### **4.3.11 Parcel G3 IRP Sites**

The remedial action status and ECC classification of IRP sites in Parcel G3 are listed in [Table 4-9](#). A portion of Parcel G3 is inside the groundwater TCE plume boundary and classified as ECC 4 (groundwater remediation is operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

Table 4-9 Parcel G3 IRP Sites					
IRP Site	Name	Location	Contaminants of Concern	Removal Action	ECC Classification
SS162	SA-B1	Storage Area B1	Unknown	NFA	ECC 3
SD011	DA-3	Building 850	TEPH, metals, lead	Excavation completed	ECC 4
SS025	PCB-6	Building 851	PCBs	Closure sampling completed	ECC 4

Information on the ECC 3 site is presented in attached [Table 4-2](#). The remedial actions completed at the ECC 4 sites in Table 4-9 are discussed below.

At Discharge Area 3 (DA-3), near B850, a removal action by excavation was completed in August 2000. The site was sampled for SVOCs, TEPH, TVPH, VOCs and metals. The COCs were cadmium, lead and diesel fuel from maintenance yard washrack runoff. Closure is documented in the “*Closure Report for CERCLA and Petroleum Hydrocarbon-Contaminated Excavation Sites*” (Jacobs, 2000d).

At Polychlorinated Biphenyl site 6 (PCB-4) near B851, additional sampling at the site that confirmed no adverse risk to human health or the environment has been completed. The site was sampled for PCBs in soil. Closure is documented in the “*Removal Action and Investigation Summary for PCB Sites 4, 5 and 6*” (Jacobs, 2003e).

#### 4.3.12 Parcel G4 IRP Sites

The remedial action status and ECC classification of IRP sites in Parcel G4 are listed in Table 4-10. Parcel G4 is located outside the groundwater TCE plume boundary.

Table 4-10 Parcel G4 IRP Sites					
IRP Site	Name	Location	Contaminants of Concern	Removal Action	ECC Classification
DP100	DP-2	Disposal Pit at LF-1	None	NFA	ECC 3
DP099	DP-1	Landfill 1	Possible hazardous waste	Excavation completed	ECC 4
DP101	DP-3	Landfill 1	Possible hazardous waste	Excavation completed	ECC 4
LF004	Landfill 1	Southeast on parcel	Possible hazardous waste	Excavation completed	ECC 4

Information on the ECC 3 site is presented in attached [Table 4-2](#). The remedial actions completed at the ECC 4 sites in [Table 4-10](#) are discussed below.

At LF-1, Disposal Pit (DP)-1 and DP-3 (LF004, DP099 and DP101), a removal action by excavation was completed in July 1999. All refuse and contaminated soil was removed, screened for contaminants and consolidated into LF-4. The COCs included cadmium, thallium; benzo(a)pyrene; 1,2-dichloroethane (1,2-DCA), gasoline and diesel. The closure report is titled “*Landfill-1, Landfill 3, and Firing Range Closure Report*” (Jacobs, 2000b).

#### 4.3.13 Parcel G5 IRP Sites

The remedial action status and ECC classification of IRP sites in Parcel G5 are listed in [Table 4-11](#). A portion of Parcel G5 is inside the groundwater TCE plume boundary and classified as ECC 4 (groundwater remediation is operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

Table 4-11 Parcel G5 IRP Sites					
IRP Site	Name	Location	Contaminants of Concern	Removal Action	ECC Classification
SD014	DA-6	Disposal Area 6	Oils, solvents, fuels	Additional closure sampling planned per RWQCB request	ECC 2

The corrective action in progress at the ECC 2 site listed in [Table 4-11](#) is discussed below.

At Discharge Area 6 (DA-6), the 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. Very low concentration of fuels in soil gas indicated that this site is probably an NFA site. The planned remedial action was replaced by investigative/closure soil boring sampling, which was performed. However, the RWQCB has requested additional closure sampling.

#### 4.3.14 Parcel G6 IRP Sites

There are no SCOU IRP sites in Parcel G6. A portion of Parcel G6 is inside the groundwater TCE plume boundary and classified as ECC 4 (groundwater remediation is

operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

#### **4.3.15 Parcel H2 IRP Sites**

There are no SCOU IRP sites in Parcel H2. A portion of Parcel H2 is inside the groundwater TCE plume boundary and classified as ECC 4 (groundwater remediation is operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

#### **4.3.16 Parcel I IRP Sites**

There are no SCOU IRP sites in Parcel I. A portion of Parcel I is inside the groundwater TCE plume boundary and classified as ECC 4 (groundwater remediation is operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

#### **4.3.17 Parcel J1b IRP Sites**

There are no SCOU IRP Sites in Parcel J1b. A portion of Parcel J1b is inside the groundwater TCE plume boundary and classified as ECC 4 (groundwater remediation is operating properly and successfully). Refer to [Section 4.2.3.1](#) for a discussion of the groundwater contamination.

#### **4.3.18 Parcel L IRP Sites**

There are no SCOU IRP sites in Parcel L. No hazardous substances or petroleum products were stored or released within this parcel. Parcel L is located outside the groundwater TCE plume boundary and is classified as ECC 1.

### **4.4 STORAGE TANKS**

#### **4.4.1 Underground Storage Tanks (USTs)**

There is a record of 136 USTs that were located within the Consolidated Parcels as listed in [Table 1-2](#). USTs are identified by the associated building number. Except as noted below, these USTs were removed under the County of Merced Leaking Underground Fuel Tank

(LUFT) program. The County of Merced, Department of Environmental Health observed and confirmed all UST removals. After removal of the UST most of the UST sites were closed by approval of the RWQCB. After removal of each UST, the Air Force implemented source removal by excavation and then, when needed, bioventing or SVE at UST sites. Site closure was by confirmation soil samples with fuel concentrations below designated levels. The location, status and the date of RWQCB closure letters for underground storage tanks are listed in attached [Table 4-12](#).

A former UST was located at B3372 (Parcel J1b) and contained Mogas (500 gallons), but was removed in 1996 under the state and local UST cleanup program.

The UST sites at B785 and B1325 have active SVE systems operating as a corrective action in the LUFT program to remove vadose zone fuel contamination remaining after removal by excavation. Closure for one removed UST at B1345 is pending additional confirmation sampling. Six USTs at the B65 site require closure report approval by RWQCB. One UST at B1336 was initially retained for reuse, but will be removed. One unregulated UST at B909 contains water, but removal is planned per Air Force policy. USTs at B340 and B1509 were left in place, but are inactive. Removal of all remaining USTs is planned in 2004. [Table 1-2](#) lists one UST at B1550, but the UST has not been found. A geophysical survey is planned to determine the UST location, if it exists. If found, the UST at B1550 will be removed. All planned UST removals (2004) should precede property transfer.

#### **4.4.2 Aboveground Storage Tanks (ASTs)**

There is a record of 61 ASTs located on Consolidated Parcels as listed in [Table 1-2](#). ASTs are identified by the associated building number. All but 26 of these ASTs have been removed. Maintenance or corrective actions at AST sites include cleaning, pickling, removal or reuse. ASTs at B65 (6), B1345 and B1509 have been removed, and regulatory approval of the site closure reports is pending. An AST at B1530 will be removed in 2004. The current AST status is summarized in attached [Table 4-13](#).

#### **4.5 OIL/WATER SEPARATORS (OWSs)**

There is a record of 33 OWSs located in the Consolidated Parcels as listed in [Table 1-2](#). OWSs are identified by the associated building number. All but three OWSs have been

removed. All but two sites, where the OWSs have been removed, are IRP sites and are listed in [Section 4.3](#). The OWS at B850 was not designated an IRP site. It was removed and is pending regulatory approval of the closure report. One OWS (B785) was discovered and removed after the BEBS was published. The OWS at B785 was removed by the DRMO as an emergency removal action and closed by DTSC letter dated 12 April 1999.

The status of the five remaining OWSs is summarized in Table 4-14:

<b>Table 4-14 Consolidated Parcels Oil/Water Separators</b>					
<b>IRP Site</b>	<b>Name</b>	<b>Location</b>	<b>Parcel</b>	<b>Contaminants of Concern</b>	<b>Removal Action Status</b>
SD198	SWMU 4.6 OWS	B88	A	Petroleum, hydraulic fluid, solvents	Two OWSs excavated and removed in 1996 and 2003; confirmation sampling completed; closure report submitted.
SD204	SWMU 4.12 OWS	B340	A	Fuels, oils, greases hydraulic fluid	Reuse retention cancelled; removal planned for 2004.
SD212	SWMU 4.20 OWS	B1509	A	Fuels	Reuse retention cancelled; removal planned for 2004.
–	B1336 OWS	B1336	A	Fuels	Reuse retention cancelled; removal planned for 2004.
–	B1530 OWS	B1530	A	Waste oil	Reuse retention cancelled; removal planned for 2004.

The removal action status for the OWSs listed in Table 4-14 is discussed in the following text.

SWMU 4.6 is recommended for remedial action in the SCOU ROD 2. One OWS was excavated and removed in 1996. The second OWS at SWMU 4.6 was removed in July 2003, and confirmation soil samples were collected and analyzed for SVOCs, TEPH, TVPH and VOCs. The closure report has been submitted for regulatory agency approval.

SWMU 4.12 and SWMU 4.20 are NFA in SCOU ROD 1. They were constructed to 1998 standards and were initially retained for reuse. These OWSs are planned for removal in 2004.

The OWS at B1336 was constructed in 1991. The construction date of the OWS at B1530 was not documented in the BEBS. Both OWSs will be removed in 2004.

#### 4.6 PESTICIDE USAGE

Refer to BEBS Section 3.3.5 for a full discussion of pesticide management at Castle AFB. Pesticides used for their intended purpose in accordance with guidelines are not considered a source of environmental contamination as hazardous substances. As discussed in the BEBS, the USEPA and State of California approved the soil sampling locations of pesticide/herbicide storage areas at B907, B908 and B917 within Parcel A. These locations were investigated during the SCOU RI/FS, and no pesticide/herbicide contamination was found. They agreed that pesticide/herbicide storage and release were no longer concerns at these facilities.

Based on laboratory analysis in 1995, Castle AFB Bio-Environmental Engineering Services has determined that drinking water from on-base wells are within the established levels set by the Safe Drinking Water Act and California Department of Health Services and thus, threat to human health or the environment is not a concern. No stored pesticides, herbicides or insecticides were identified in the VSI reports.

#### 4.7 POLYCHLORINATED BIPHENYLS (PCBS)

There is no record of storage and release of PCBs in the Consolidated Parcels as indicated in the BEBS. The later SCOU RI/FS detected seven potential PCB-contaminated sites within the Consolidated Parcels which are associated with leaking power transformers. B871 (Parcel F2) and PCB sites 1, 8 and 9 (Parcel A) are IRP sites designated NFA in SCOU ROD 1. B871 and PCB-9 were designated NFA after interim removal action responses were completed as described in [Section 4.3.7](#). At PCB sites 4 and 5 (Parcels F3 and G2) an interim removal action was completed. At PCB-6 (Parcel G3), additional sampling confirmed that there was no residual contamination that would pose an adverse risk to human health or the environment, as described in [Section 4.3.11](#). These IRP sites are designated NFA in SCOU ROD 2.

All known Air Force owned transformers containing PCBs at greater than 5 parts per million (ppm) were removed as of January 1991. However, since then surplus transformers from the BoP and Parcel A sites have been stored by the County of Merced in the PFFA area between B59 and B79. Transformers of unknown origin were also stored at B1348. 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. Any additional testing and cleanup is the responsibility of the County of Merced as assigned by their lease.

Serviceable PCB-containing equipment in the form of PCBs in fluorescent light ballasts may be present on the property. Fluorescent light ballasts are present in fluorescent light fixtures in certain facilities within the Consolidated Parcels. All fluorescent light ballasts are suspected to contain PCBs. Prior to remodeling, demolition or light fixture replacement, fluorescent light ballasts should be removed, inspected and properly disposed of.

#### **4.8 RADON (NO CHANGES)**

A radon screening survey at Castle AFB was conducted in December 1987 by the Base Environmental Engineering office. This survey involved 30 military family housing units, the Child Care Center, the dormitories, two temporary lodging facilities and an administrative facility. The radon screening sample results were all below the EPA-recommended mitigation level of 4.0 picocuries per liter (pCi/L) as indicated in the BEBS.

#### **4.9 ORDNANCE**

There is no record of storage, release or disposal of any ordnance associated with the Consolidated Parcels as indicated in the BEBS and VSI. A box of unused 50-caliber bullets (live rounds) was removed from LF-1 (Parcel G4) in 1998 during a removal action and transferred to the Merced Police Department. B806 (Parcel G3) is subleased to Evans Security Company, which uses limited small arms and ammunition.

#### **4.10 ASBESTOS**

Table 1-2 contains a column that indicates the presence of ACM within buildings. ACM is listed as present in 62 existing facilities, not present in nine existing facilities and its presence is unknown within the remaining facilities and buildings in the Consolidated

Parcels, except for Parcel J1b. The housing units within Parcel J1b likely contain ACM and are described in this section. The 1993 County of Merced building demolition grant project removed many buildings and facilities containing ACM. The current status of the 62 facilities with known ACM is summarized in Table 4-15, based on the VSIs:

<b>Table 4-15 Consolidated Parcels Buildings Containing Known ACM</b>			
<b>Building Number</b>	<b>Parcel</b>	<b>Use</b>	<b>VSI Status June 2003</b>
47	A	Storage	Damaged pipe insulation
54	A	Storage	In reuse - Interior not inspected
256	A	Dining Hall	Building Demolished
325	A	Industrial	Damaged pipe insulation, ceiling tiles floor tiles
508	A	Office	In reuse - Interior not inspected
789	A	Bowling Sport	In reuse - Interior not inspected
1230	A	Office	In reuse - Interior not inspected
1260	A	Industrial	No damaged ACM observed
1309	A	Office	No damaged ACM observed
1310	A	Industrial	In reuse - Interior not inspected
1315	A	AFRPA Office	No damaged ACM observed
1319	A	Industrial	Damaged ceiling tiles on the floor
1320	A	Office	In reuse - Interior not inspected
1322	A	Office	In reuse and renovation - Interior not inspected
1325	A	Office & Industrial	In reuse - Interior not inspected
1330	A	Office	No damaged ACM observed
1333	A	Classrooms	No damaged ACM observed
1335	A	Office	Minor ceiling and floor tile damage
1340	A	Office	No damaged ACM observed
1344	A	Fire Department	No damaged ACM observed
1350	A	Hangar	Broken transite siding observed
1360	A	Storage	Damaged transite siding on pavement. Damaged ceiling tiles on floor.
1404	A	Storage	No damaged ACM observed
1405	A	Shop	No damaged ACM observed
1532	A	Shop	Damaged ceiling tiles on the floor
1540	A	Office	Damaged ceiling tiles on the floor
1545	A	Office	Damaged ceiling tiles on the floor
1550	A	Industrial	In reuse - Interior not inspected
1560	A	Storage	In reuse - Interior not inspected
1582	A	Storage	Small amount of damaged ceiling tiles
1709	A	Shop	No damage observed
1907	A	Generator	All surfaces have deteriorated

**Table 4-15  
Consolidated Parcels  
Buildings Containing Known ACM**

<b>Building Number</b>	<b>Parcel</b>	<b>Use</b>	<b>VSI Status June 2003</b>
680	C1	Recreation	No damage observed
51	C2b	Storage	In reuse - Interior not inspected
1182	E	Hospital	In reuse - Interior not inspected
395	F1	Recreation	In reuse - Interior not inspected
404	F1	Dining Hall	Building demolished
480	F1	Dormitory	Damaged floor tiles
482	F1	Dormitory	Damaged Pipe insulation observed
447	G1DK	Office	Building demolished
1005	G1DK	Classrooms	Building demolished
1007	G1DK	Storage	In reuse - Interior not inspected
1015	G1DK	Classrooms	In reuse - Interior not inspected
1101	G1DK	VOQ	Building demolished
1103	G1DK	VOQ	Building demolished
1108	G1DK	Office	Building demolished
1109	G1DK	VOQ	Building demolished
1111	G1DK	Dormitory	Building demolished
1112	G1DK	Dormitory	Building demolished
1113	G1DK	Dormitory	Building demolished
1114	G1DK	Dormitory	Building demolished
1115	G1DK	Dormitory	Building demolished
1116	G1DK	Temporary living	Building demolished
1117	G1DK	Temporary living	Building demolished
1118	G1DK	Dormitory	Building demolished
1119	G1DK	Dormitory	Building demolished
1121	G1DK	Office	Building demolished
1122	G1DK	Office	Building demolished
1123	G1DK	Office	Building demolished
1124	G1DK	Classroom	Building demolished
1131	G1DK	Dormitory	Building demolished
1132	G1DK	Office	Building demolished
786	G2	Theater	Building demolished

During the basewide survey in December 1993, a representative population of the Castle Garden Housing Units (15 percent) in Parcel J1b was inspected for ACM. Various construction materials were visually examined and submitted for laboratory analysis. Sheetrock samples from walls and ceilings were positive for asbestos in 30 percent of the surveyed units. Vinyl flooring tiles were assumed to contain asbestos in all units. Roofing

and duct materials were also positive (or assumed positive) for asbestos in some units. All ceiling tiles sampled were negative for asbestos.

For the VSIs, typically only buildings and facilities that were not in use were entered for a potential ACM inspection. VSIs are not required for occupied buildings to confirm the suitability of the building for transfer since the lessee is required to comply with the ACM provisions in the lease. The VSIs checked for known potential ACM. ACM surveying and material testing is required for construction safety. Maintaining ACM, abating ACM during remodeling and abating ACM during demolition is the responsibility of the tenants as assigned by leases and subleases. The property is to be transferred to the present lease holders.

The ACM in B1182 (Parcel E) includes sprayed-on fireproof ceiling, mud fittings on fiberglass lines, boiler feed piping, mechanical equipment tanks, mechanical equipment heat exchanger, mechanical equipment gaskets, white tar, tar paper over domestic lines, 12"x12" and 9"x9" vinyl composite floor tile, 2"x2" lay-in ceiling tile, tar on pipe hangers, transite in-vapor hood, white fibrous electrical system component, brown paper electrical system component, sheetrock walls and ceilings, black tar, transite walls, paper on batt insulation, rolled sheet roofing, asphalt roofing, tar on fiberglass fittings and pipe insulation. The interior and roof of B1182 was not inspected during the VSI conducted June 2003. The lessee has a copy of the asbestos report.

The VSIs conducted in May – July 2003 (and October – December 2003 updates) observed that damaged ACM was present in some buildings. During these VSIs, the following problems with potential ACM were observed:

- Damaged ceiling and/or floor tiles were observed at B325, B1253, B1314, B1319, B1324, B1335, B1360, B1509, B1532, B1535, B1540, B1545 and B1582 in Parcel A; B362, B372, B373 and B480 in Parcel F1; and B425 in Parcel G1DK.
- Deteriorated interior surfaces due to weather exposure were observed at B949 and B1907 in Parcel A.
- Buildings 1207, 1208 and 1210 through 1215 (Parcel A): ACM was removed prior to demolition.
- Fenced storage yard near B1323 (Parcel A): Piles of tiles are stored at this location.
- Damaged exterior transite siding was observed at B1350 and B1360 in Parcel A.

- Damaged steam pipe insulation was observed at B47, B325, B472 and B482 (Parcel F1).
- Buildings 3000 through 3546: The Castle Gardens housing units (Parcel J1b) were built in 1958 and likely contain ACM, particularly ceiling tiles and steam pipe insulation. Although building interiors were not examined during the VSI, the exterior condition was generally deteriorated due to weather exposure and poor maintenance. It is likely that ACM exists in a damaged condition in these housing units.

The ACM conditions listed above were not observed during previous VSIs and furnishing inventories for individual parcel SBEBS, FOSLs and leases.

#### 4.11 LEAD-BASED PAINT (LBP)

Table 1-2 contains a column that identifies buildings constructed prior to 1978 that may contain LBP. Buildings and structures at Castle Airport were mostly painted with latex based paints even prior to 1978. Latex paints typically use titanium oxide rather than lead oxide as a white pigment.

During the basewide survey in December 1993, a representative sample of the Castle Garden housing units (12 percent) in Parcel J1b was inspected for LBP. However, all materials selected for analysis (door/window frames, baseboards, shelves, etc.) were items either inaccessible or otherwise unsuitable for field measurements by x-ray fluorescence. Therefore, the survey was inconclusive for LBP.

The condition of the external painted surfaces on most buildings was observed during the VSIs conducted May – July 2003 (and October – December 2003 updates). Typically only buildings and facilities that were not in use were entered for a potential LBP inspection. Maintaining painted surfaces, abating LBP during remodeling and abating LBP during demolition is the responsibility of the tenants as assigned by leases and subleases. The property is to be transferred to the County.

The VSIs conducted May – July 2003 (and October – December 2003 updates) observed the following problems with peeling paint:

- B51 (Parcel A) is known to contain LBP.
- Varying degrees of interior/exterior peeling paint with paint chips on floor/ground surfaces were observed at B54, B1260, B1360, B1314, B1529, B1905 and B1907 in Parcel A.

- Interior peeling paint was observed at B325 and B1319 in Parcel A.
- Minimal interior/exterior paint damage was observed at B1350, B1354 and B1356 in Parcel A.
- Degraded exterior surfaces with peeling paint and rotting wood siding were observed at B618 and B653 in Parcel C1.
- Varying degrees of peeling paint on exterior walls, fascia, pipes and doors were also observed at B300, B315, B316, B317, B318 and B362 (Parcel F1). However, these buildings were built after 1978 and probably do not contain LBP.
- Varying degrees of peeling paint on exterior walls, fascia, pipes and doors were observed at B47, B1230, B1231, B1353, B1401, B1402, B1403, B1550, B1561, B1582, B1707, B1309, B1321, B1324, B1335, B949, B950 and B1337 in Parcel A; B1041, B1042 and B1045 (Parcel C2a); B51 (Parcel C2b); B372, B373, B360, B480, B482, B394, B398 and B465 (Parcel F1); B535 (Parcel F3); B427 and B1009 (Parcel G1DK); B1110, B1146 and B1147 (Parcel G6); and B264 and B1107 (Parcel H).
- Some exterior peeling paint was observed on many of the Castle Gardens housing units in Parcel J1b. These houses were built in 1958 and are likely to contain LBP. Many of the buildings have deteriorated due to weather exposure and lack of maintenance.

#### **4.12 RADIOACTIVE & MIXED WASTE**

There is no record of storage, release or disposal of any radioactive or mixed wastes associated with the property in the Consolidated Parcels as indicated in the BEBS or VSI. During the excavations of LF-1 and LF-2 and consolidation of LF-4 radioactive screening was used on excavated soils and completed excavations. One small radioactive medical source pellet and two radioactive metal fragments were recovered from excavated waste at LF-1. Details concerning these retrieved items are found in Section 3.3.4 of the "Landfill 1, Landfill 3 and Firing Range Closure Report" (Jacobs, 2000b).

#### **4.13 MEDICAL/BIOHAZARDOUS WASTE**

Records indicate biohazardous wastes were generated at B806 prior to 1995. Castle AFB was permitted by Merced County to generate biohazardous wastes and to treat the wastes on site. The wastes generated at B806 were handled according to the Castle AFB Infectious Waste Protocol. These wastes were disposed of in a permitted San-i-Pak device that combines a biohazardous waste autoclave and domestic refuse trash compactor located at Castle AFB Hospital, B1180. When the unit was full, its contents were disposed of as domestic waste at the Merced County Highway 59 landfill. There is no other record of

storage, release or disposal of any medical/biohazardous wastes associated with the Consolidated Parcels as indicated in the BEBS and VSI.

Medical and dental x-ray operations, as well as other x-ray and photographic operations, produced photochemical wastes. These wastes were treated by silver recovery units (SWMU 4.24 and SWMU 4.25) that extract silver from the photochemical solution. (SWMU 4.24 and SWMU 4.25) were operated under the Conditionally Exempt tier of California's Tiered Permitting Program within B1182. The remaining solution was discharged to the sanitary sewer. B1182 is at present (2003) leased as an active hospital. The hospital organization is responsible for its own medical and biohazardous waste.

#### **4.14 WASTEWATER DISCHARGE**

##### **4.14.1 Sanitary Sewer**

The sanitary sewer system is connected to buildings in the Consolidated Parcels. No substantive releases of wastewater contaminants in this parcel have been reported. The sanitary sewer system consists of approximately 90,500 feet in total length of sanitary sewer piping, and has been disconnected by the Air Combat Command from the now demolished Castle AFB sewage treatment plant. The sanitary sewer system is now connected to the City of Atwater sewage treatment plant. The sanitary sewer piping system has been repaired. Details as to the repairs conducted within the Consolidated Parcels are shown in the report "*Repairs to the Main Base Sanitary Sewer System,*" dated August 1998.

There are septic tank systems and leach fields at B1042 (Parcel C2a) and B1596 (Parcel A). In adjacent Parcel B2, SCOU ROD 2 IRP sites B1762 and B1709 were connected to separate septic tank leach fields in Parcel A (site ST-1). Both leach fields in Parcel A have been sealed and closed. The IRP closure of these leach fields is discussed in [Section 5.2.1](#).

##### **4.14.2 Storm Drain System**

The Storm Drain System (SDS) is a CERCLA NFA site in SCOU ROD 1. As a best management practice, a surface scrape was completed. The SDS within the Consolidated Parcels is regulated by a waste discharge permit. Waste Discharge Requirement (WDR) Order No. 96-273, NPDES No. CA0083976 was adopted by RWQCB on 25 October 1996 and is active at present (August, 2003). This WDR superseded Order No. 92-181 which

included the former wastewater treatment plant. WDR Order No. 96-273 requires inspection and maintenance of the storm drain system and storm water sampling. The County of Merced is applying for a WDR permit to replace the Air Force as the discharger. The BoP Parcels B1, B2, B3 and B4 storm drain discharges into Parcel A.

There is a general construction activities NPDES permit (Water Quality Order 99-08-DWQ) that applies to all ground disturbing construction activities.

#### **4.15 SOIL BIOREMEDIATION TREATMENT FACILITY**

The Castle Soils Bioremediation Treatment Facility (CSBTF) was constructed northwest of B1309. The Soils Bioremediation Treatment Facility (Class II waste pile) within the Consolidated Parcels was formerly regulated by a waste discharge permit. WDR Order No. 96-251 was adopted by the RWQCB as Resolution No. 96-250 on 20 September 1996. Petroleum contaminated soils were processed at this facility and treated soils were used beneath the engineered cap at LF-4. The Soils Bioremediation Treatment Facility was no longer needed when the LF-4 cap was completed.

The RWQCB letter of 23 December 2002 states that the CSBTF was closed in accordance with the approved closure plan (including closure sampling) and *Draft Final Closure Report*, dated 8 May 2002. Rescission of the WDR Order No. 96-251 was adopted by the RWQCB as Resolution No. R5-2002-0215 on 6 December 2002.

#### **4.16 NATURAL ENVIRONMENT (NO CHANGES)**

The following natural resources for Castle AFB and the surrounding region were evaluated in the FEIS and reevaluated during the VSIs.

##### **4.16.1 Geology**

Refer to FEIS Section 3.4.1 for information on this topic. No changes/corrections were identified in the VSI reports.

#### **4.16.2 Water Resources**

Refer to FEIS Section 3.4.2 for information on this topic. No changes/corrections were identified in the VSI reports.

#### **4.16.3 Air Quality**

Refer to FEIS Section 3.4.3 for information on this topic. No changes/corrections were identified in the VSI reports.

#### **4.16.4 Noise**

Refer to FEIS Section 3.4.4 for information on this topic. No changes/corrections were identified in the VSI reports.

#### **4.16.5 Biological Resources**

Refer to FEIS Section 3.4.5 for information on this topic. No changes/corrections were identified in the VSI reports.

#### **4.16.6 Cultural Resources**

Refer to FEIS Section 3.4.6 for information on this topic. No changes/corrections were identified in the VSI reports.

Based on the FEIS, there are no natural resources that may be impacted. There are no designated wetlands/sensitive habitats or any associated threatened or endangered species within the Consolidated Parcels. Based on the VSIs, the conditions of natural resources within the Consolidated Parcels have not changed since the FEIS.

The portions of Parcels F2 and G4 southeast of the Facility 936 holding ponds and northeast of B1582 (end of runway) were located within a 100-year floodplain as identified in the BEBS. Executive Order 11988 provides Federal Agency responsibilities for managing floodplains, to include the strict control of new construction located within the floodplains. The Federal Emergency Management Agency (FEMA) 100-year floodplain area (August 1995) is shown on [Figure 4](#). Based on the updated floodplain map, only portions of Parcels A and L now lie within the current floodplain.

## 5 ADJACENT PROPERTIES

*Note: The following subsections have been updated substantially since the 1993 BEBS: all except 5.3 and 5.4.*

Adjacent properties within 0.25 miles of the Consolidated Parcels presented in this section are those which have a contamination potential; or where release, disposal, and/or migration of hazardous substances or petroleum products have occurred. The 0.25-mile survey radius of the Consolidated Parcels extends off base on all sides of the Castle AFB boundaries to include agriculture and undeveloped land. [Figures 2 and 3](#) show the active IRP and UST sites within 0.25 miles of the Consolidated Parcels. On-base facilities on the adjacent parcels are listed in [Table 5-1](#).

Vadose zone contamination does exist at IRP sites in adjacent parcels. Remedial action or Interim removal measures are being taken under the Air Force's removal action program. COCs include PCBs, SVOCs, VOCs, TEPH and TVPH. Groundwater contamination does exist in the adjacent parcels and beneath adjacent properties. TCE is the primary groundwater COC on adjacent parcels and properties, and TCE concentrations are monitored through sampling conducted per the CB ROD-Part 1.

The Main Base TCE plume has migrated off base to the south and southwest. Groundwater TCE contamination from suspected sources in Parcel B2 has migrated to the west under Parcel A. [Figures 2 and 3](#) show the extent of the off-base groundwater plumes.

### 5.1 OFF-BASE ADJACENT PROPERTIES

Groundwater contamination is present under the off-base adjacent properties. TCE is the primary COC. Data from the LTGSP 2003 Annual Report, indicates that the Main Base Plume extends off-base to the south downgradient of Parcels G2, C2a, and J2 and G1DK and extends further off-base after crossing under Parcels C1 and J1b. Monitoring data show that TCE concentrations have generally decreased since 1995. The maximum TCE concentration off base to the south has dropped from a high of 40 µg/L in 1995 to the current level of 12 µg/L (MW1010). The TCE concentrations off-base to the west have dropped from a high of 570 µg/L in 1995 to current levels of less than 40 µg/L (MW806A).

The extent of the TCE plume is receding toward the base boundary due to the effectiveness of the groundwater treatment systems.

Investigations and borings were completed at the base boundary immediately west of Landfill 4 in Parcel A. However, sample results from the investigation, reported in the LTGSP 2003 Annual Report established that TCE in the Landfill 4 plume had not migrated off-base at concentrations exceeding the MCL.

Formerly, there was an area of off base TCE groundwater contamination south of the B1, B4 and B5 parcels. This area was identified as the East Base Plume in the CB ROD–Part 1. TCE concentrations within the East Base Plume only slightly exceeded the MCL and the plume area was very small. Due to the low TCE concentrations and the small plume size, the selected remedy for the East Base Plume in the CB ROD–Part 1 was annual monitoring and evaluation to determine if pump and treat remediation was necessary or if groundwater contaminant levels dropped below the MCL for one year thereby warranting no further action. As a result of the annual evaluation documented in the LTGSP 2003 Annual Report, monitoring of the East Base Plume will be discontinued in 2004 .

## 5.2 ON-BASE ADJACENT PROPERTIES

Both groundwater and vadose zone contamination does exist at IRP sites in adjacent parcels of US government owned properties. The 0.25-mile survey radius of the Consolidated Parcels includes portions of Parcels B1, B2, B3 and B4, which have been transferred to the BoP. A discussion of these properties is included because the Air Force retains control of the IRP sites through a Memorandum of Understanding with the BoP. Facilities on the adjacent parcels are listed in [Table 5-1](#). Remedial action and interim removal measures are being taken under the Air Force's CERCLA program. COCs include SVOCs, TEPH, TVPH, VOCs and pesticides. The following additional facilities (now demolished), not listed in [Table 5-1](#), were identified by the VSIs: B1718 (training) and B1901 (unknown), both in Parcel B1. [Table 5-1](#) has been updated with the available information for these facilities.

### 5.2.1 IRP Sites in Adjacent Properties

Four IRP sites located within 0.25 miles of the Consolidated Parcels are designated NFA in SCOU ROD 1. Five IRP sites, located within 0.25 miles of the Consolidated Parcels are the subject of past or present removal actions or CERCLA remedial actions.

The IRP sites listed in Table 5-2, located within 0.25 miles of the Consolidated Parcels, are PHO sites (ECC 2) or NFA sites, either no action (ECC 3) or remedial action response complete (ECC 4) sites in SCOU RODs 1 or 2. These ECC 2/ECC 3 and ECC4 sites are shown on [Figures 2](#) and [3](#), respectively.

<b>Table 5-2 Adjacent Parcels – ECC 2, 3 and 4 Sites SCOU RODs 1 and 2 No Further Action – No Action and Response Complete/PHO Sites</b>					
<b>IRP Site</b>	<b>Name</b>	<b>Location or Function</b>	<b>Parcel</b>	<b>Possible Contaminants of Concern</b>	<b>Removal Action / ECC Classification</b>
SS105	B1865, B1868	Building 1865 and 1868 UST Site	B2	Fuel oil	UST removal and excavation completed. Site closed–NFA / ECC 2
DP094	DP-7	Landfill 5 Disposal Pit	B1	Refuse, fuels, possible hazardous waste	NFA–no action / ECC 3
WP192	ETC-13	Aircraft Parts Disposal Area	B1	Metals petroleum products	NFA–no action / ECC 3
SD137-SD145	N-2 through N-10	Northeast of flightline. Use unknown	B2	None	NFA–no action / ECC 3
--	H-1 through H-3	Commercial gas stations	off-base property	Fuels	NFA–no action / ECC 3
SS116	B1709	Building 1709 and Leach Field in Parcel A	B2, A	TCE	SVE completed. Site closed–NFA / ECC 4
SS117	B1762	Building 1762	B2	TCE	SVE completed. Site closed–NFA / ECC 4
ST032	ST-1	Leach Field Near Building 1762 in Parcel A	B2, A	TCE	Closed with B1762. NFA / ECC 4
OT030	OU-2	Near Building 1762	B2	TCE	Groundwater pump and treat / ECC 4

The PHO and remedial action sites (Response Complete) listed in Table 5-2 and shown on [Figures 2](#) and [3](#) are described below.

At B1865/B1868, two USTs were removed in 1996. The site is designated PHO in SCOU ROD 1. The COCs were fuels associated with boiler and generator operations. Additional fuel-contaminated soils were excavated in 2000 and confirmation samples were collected and analyzed for TVPH and TEPH. The closure report is titled "*Closure Report for CERCLA and Petroleum Hydrocarbon-Contaminated Excavation Sites*" (Jacobs, 2000). The site was closed by an RWQCB letter dated 7 December 2001.

B1709 (IRP site SS116) is located in Parcel B2 within the former Weapons Storage Area and was a special weapons maintenance shop. B1709 includes an associated septic tank leach field located southwest of building 1709 in Parcel A. A selected remedy of SVE was identified for B1709 in the SCOU ROD 2. The COC at B1709 is TCE. SVE was implemented at the B1709 site from August 2000 through December 2001 under the SVE Decision Study. The closure report titled "*Soil Vapor Extraction Decision Study, Building 1709 Closure Report*" was approved by the regulatory agencies in October 2003. The site is now NFA. The leach field in Parcel A was sealed and closed and replaced by a leach field in Parcel B2 prior to transfer to the BoP.

B1762 (IRP site SS117) is located in Parcel B2 within the former Weapons Storage Area and was a weapons and aircraft maintenance shop. An associated leach field (ST-1) in Parcel A designated ST032 will close with the B1762 site. A selected remedy of SVE was identified for B1762, including ST-1, in the SCOU ROD 2. The COCs at B1762 are 1,1-DCE and TCE. In accordance with a Removal Action Memorandum, dated June 2001, SVE was implemented at B1762 in December 2001 and recently terminated. The closure report titled "*Final Closure Report Building 1762*" was approved by the regulatory agencies in September 2003. The site is now NFA. The leach field in Parcel A was sealed and closed prior to transfer to the BoP. B1762 has been demolished.

A portion of Parcel B2 is within the 0.25-mile survey radius of the Consolidated Parcels is underlain by the upgradient portion of the Main Base Plume. The source of groundwater contamination is from suspected sites on Parcel B2 near B1762 and B1709. Parcel A is downgradient of the suspected source areas in Parcel B2. Source removal has been completed and SVE remediation terminated at both B1762 and B1709 (both closure reports have been submitted for agency review/approval). [Figure 3](#) shows the extent of the groundwater plumes on adjacent parcels. Due to its downgradient location, the OU-2

treatment system would eventually capture and treat the groundwater contamination originating from Parcel B2.

Beginning in 2000, TCE concentrations in monitoring wells located downgradient from the B1762 and B1709 areas began to increase. Accordingly, the Air Force initiated an investigation that resulted in the installation of wellhead treatment units located on either side of the flightline within Parcel A and downgradient of the B1762/B1709 areas (MW824 and MW883/MW1021). Although the OU-2 system would eventually capture the contamination in these areas, the local wellhead treatment systems are designed to shorten the remedial timeframe. The maximum TCE concentration in the area was 10 µg/L (MW1021) at the end of 2003. Although the contamination is being addressed by the wellhead treatment units at MW824 and MW883/MW1021, an investigation aimed at further characterizing the TCE plume and improving remedial performance is ongoing.

Groundwater cleanup progress by the OU-2 and wellhead treatment systems is being monitored regularly under the Air Force's LTGSP and reported semiannually. The Air Force has determined that the groundwater treatment system is operating properly and successfully within the Consolidated Parcels as described in the OPS.

IRP sites located within 0.25 miles of the Consolidated Parcels with active removal actions (ECC 5) are listed in Table 5-3.

<b>Table 5-3</b> <b>Adjacent Parcels – ECC 5 Sites</b> <b>SCOU ROD 3 Remedial Action in Progress Sites</b>					
IRP Site	Name	Location	Parcel	Contaminants of Concern	Removal Action
FT001	FTA-1	Near FAA Radar	B1, B5	TCE, fuels	SVE & bioventing

The remedial action site listed in Table 5-3 and shown on [Figure 3](#) is described below.

FTA-1 (IRP site FT001) surrounds the FAA radar tower and is located along the eastern boundary of Castle Airport and was used from 1955 through 1975 for fire training exercises. Based on the SCOU RI/FS and the FTA-1 Focused Feasibility Study, April 2002, the preferred remedy for FTA-1 is capping, excavation of wastes outside the cap that exceed EPA criteria, SVE, bioventing and institutional controls. The COCs at FTA-1 are SVOCs, VOCs, fuels, metals and dioxins/furans. In accordance with a Removal Action

Memorandum, dated September 1995, SVE and an engineered cap were installed at FTA-1 in 1996. SVE was operated and maintained at the site from 1996-1999 and then from late 2000 through the present. SVE operations will be maintained until VOC RAOs are attained, at which time bioventing will be implemented to address residual hydrocarbons, as necessary. In order to ensure its integrity, the engineered cap installed in 1996 is being maintained and monitored consistent with the requirements for landfill caps specified in state regulations. Institutional controls at the FTA-1 site are implemented via the Memorandum of Understanding between the Air Force and BoP. The final remedy for FTA-1 will be documented in the SCOU ROD 3, scheduled for completion in 2004.

### 5.2.2 Storage Tanks On Base in Adjacent Parcels

All known USTs have been removed and all UST sites have been closed on the adjacent parcels within 0.25 miles of the Consolidated Parcels. ASTs within 0.25 miles of the Consolidated Parcels have been inspected, cleaned, pickled or removed prior to transfer of the adjacent properties. Only one AST is listed as active. Former UST sites and all AST sites within 0.25 miles of Consolidated Parcels are listed in Tables 5-4 and 5-5, respectively.

<b>Facility or Building Number</b>	<b>Parcel</b>	<b>EBS Table 3-4 Status 1993</b>	<b>Contents</b>	<b>Capacity (gallons)</b>	<b>Removal Date or Status</b>	<b>Date of RWQCB Closure Letter</b>	<b>Years of Operation</b>
1728	B1	Inactive	Diesel	5000	In EBS only	NA	-
1709	B2	Active	Heating Fuel	2,000	3/21/1996	4-Nov-97	1956 – 1996
1715	B2	Active	Heating Fuel	800	5/9/1996	4-Nov-97	1956 – 1996
1750	B2	Active	Diesel	4,000	1/26/1994	30-Jul-97	NA – 1994
1762	B2	Inactive	Heating Fuel	800	12/15/1993	30-Jul-97	NA – 1993
1865	B2	NA	Heating Fuel	550	5/9/1996	9-Jan-97	1952 – 1978
1868	B2	NA	Diesel	550	5/9/1996	30-Jul-97	1952 – 1978

<b>Table 5-5 Adjacent Parcels AST Sites Within 0.25 Miles</b>							
Facility or Building Number	Location	Parcel	Status EBS Table 3-4 1993	Contents	Capacity (gallons)	Years of Operation	Program Status
1708	WSA	B2	Removed	Diesel	275	1956-1998	Removed
1715	WSA	B2	Active	Unknown	500	Unknown	Removed
<b>Notes</b> WSA weapons storage area							

### 5.3 OIL/WATER SEPARATORS (OWSs) (NO CHANGES)

There are no known OWSs located within 0.25 miles of the Consolidated Parcels.

### 5.4 PESTICIDE USAGE ON BASE IN ADJACENT PARCELS (NO CHANGES)

Records indicate that pesticides and herbicides were applied in accordance with the manufacturer's guidance and that there has been no substantive releases on adjacent parcels and thus, threat to human health or the environment is not a concern.

### 5.5 ORDNANCE ON BASE IN ADJACENT PARCELS

There is no record of release or disposal of any ordnance associated with adjacent parcels within 0.25 miles as indicated in the BEBS and VSI. There is a record of storage of ordnance associated with adjacent parcels within 0.25 miles as indicated in the BEBS and VSI. Ordnance storage occurred on Parcel B2 in the Weapons Storage Area prior to 1995 as part of Air Force operations. Presently no known ordnance is stored, released or disposed on adjacent parcels within 0.25 miles. The BoP operates a minimum security prison facility and a warehouse within the 0.25 mile zone and may have small arms or riot control ordnance in those facilities.

### 5.6 RADIOACTIVE & MIXED WASTES ON BASE IN ADJACENT PARCELS

There is no record of storage, release or disposal of any radioactive or mixed wastes associated with the property in the adjacent parcels as indicated in the BEBS. Recently discovered documentation indicates the possibility that mixed waste consisting of contaminated cleaning supplies for radioactive devices may have been buried in trenches

inside the Weapons Storage Area in Parcel B2. A remedial investigation to locate any buried radioactive waste is currently in progress.

## **5.7 SANITARY SEWER ON BASE IN ADJACENT PARCELS**

In adjacent Parcel B2, SCOU ROD 2 IRP sites B1762 and B1709 were connected to septic tank leach fields in Parcel A. Two septic tanks in Parcel B2 were either abandoned (B1761) or demolished (B1713). The closure of these leach fields is discussed in [Section 5.2.1](#). The sanitary sewer for BoP Parcels B1-B4 is connected to the sanitary sewer system for Castle Airport and crosses under Parcel A.

## **5.8 SUMMARY OF ADJACENT PARCELS IMPACT**

In summary, the primary impact from the adjacent parcels is a groundwater TCE plume that has migrated under the runway into Parcel A. The groundwater contamination is being remediated by wellhead treatment systems at MW824 and MW883/MW1021, which are operating properly and successfully.

## 6 CONCLUSION

*Note: This entire section has been updated substantially since the 1993 BEBS.*

As discussed in [Section 1](#), the definitions and categories for the DOD ECC classifications have changed. The current ECC classifications for CERCLA and non-CERCLA (PHO) sites within the Consolidated Parcels are presented in this section. This includes property listed inside and outside the groundwater TCE plume and all NFA IRP sites (no action and response complete). CERCLA sites with active SVE/bioventing treatment systems and ETC-8 are excluded from the transfer. Overall, the Consolidated Parcels are classified ECC 4 due to the groundwater treatment systems (and LF-4 remedy) operating properly and successfully.

All areas outside the groundwater plume that are not current or former IRP sites, UST sites or PHO sites are classified as ECC 1 (Parcel L only). The ECC 1 property is shown on [Figure 2](#).

All non-CERCLA PHO and UST sites are classified ECC 2, including NFA–Response Complete and active correction action sites. The active PHO sites are listed in [Tables 4-1, 4-7 and 4-10](#) ([Sections 4.3.1.1, 4.3.10 and 4.3.13](#)). The active UST sites are discussed in [Section 4.4.1](#). These sites are undergoing corrective actions, but are not now in the CERCLA program. The PHO/UST sites are shown on [Figure 2](#).

Areas in the Consolidated Parcels with only NFA–No Action CERCLA sites are classified as ECC 3 and the NFA–No Action sites are listed in attached [Table 4-2](#). The ECC 3 sites are shown on [Figure 2](#).

The category ECC 4 is applied to the groundwater sites OU-1 (OT029) and OU-2 (OT030) and to landfill IRP sites LF-4, DP-5, and DP-6 in Parcel A, which are undergoing remedial action that is operating properly and successfully within the Consolidated Parcels as described in the OPS, (Final dated February 2004). Institutional controls and monitoring requirements are described in the SCOU ROD 3 and OPS. The status of these landfill IRP sites is listed in [Section 4.3.1.3 \(Table 4-1\)](#). The category ECC 4 is also applied to NFA–Response Complete IRP sites ([Tables 4-1 and Section 4.3.1.3, Table 4-5 in Section 4.3.7,](#)

Table 4-6 in Section 4.3.8, Table 4-7 in Section 4.3.9, Table 4-9 in Section 4.3.11 and Table 4-10 in Section 4.3.12. The ECC 4 sites are shown on Figure 3.

The excluded CERCLA sites with active remediation (ECC 5) are listed in Table 4-1, discussed in Section 4.3.1.4 and shown on Figure 3.

The VSIs conducted in May – July 2003 (and October – December 2003 updates) found deteriorated paint and damaged ACM on some structures, improperly stored hazardous materials and recent evidence of possible hazardous substance releases within the Consolidated Parcels. The affected facilities and specific conditions are identified in Section 4. Many of the Castle Gardens housing units (Parcel J1b) are in poor condition and probably contain ACM and LBP.

Information that contaminated cleaning supplies for radioactive devices may have been buried at the Weapons Storage Area in adjacent Parcel B2 has recently been discovered and an investigation is ongoing.

The environmental factors identified in this SBEBS and overall ECC classifications are summarized by parcel in Table 6-1. Each parcel is assigned the highest ECC classification for an individual item within the group. The presence of ACM or LBP does not impact the environmental condition category of a property, but the table indicates if these materials are present. Refer to the appropriate SBEBS section for details on a specific environmental factor for a given parcel.

Parcel	LBP	ACM	Groundwater Remediation	Soil Remediation	PHO/UST Sites	OWS	PCBs	Hazardous Material Storage	Overall ECC Classification
A	yes	yes	yes	yes	yes	yes	yes	yes	ECC 4
C1	yes	yes	yes	—	—	—	—	—	ECC 4
C2a	yes	—	yes	—	—	—	—	—	ECC 4
C2b	yes	yes	yes	yes	—	—	—	—	ECC 5
E	—	yes	yes	—	—	—	—	yes	ECC 4
F1	yes	yes	yes	yes	yes	—	—	yes	ECC 4
F2	—	—	—	yes	—	—	yes	yes	ECC 4
F3	yes	—	yes	yes	—	—	—	yes	ECC 4
G1DK	yes	yes	yes	yes	—	—	—	yes	ECC 4
G2	—	yes	yes	—	yes	—	—	yes	ECC 4
G3	—	—	yes	yes	—	—	—	yes	ECC 4
G4	—	—	—	yes	—	—	—	—	ECC 4
G5	—	—	yes	—	yes	—	—	yes	ECC 4
G6	yes	—	yes	—	—	—	—	—	ECC 4
H2	yes	—	yes	—	—	—	—	—	ECC 4
I	—	—	yes	—	—	—	—	—	ECC 4
J1b	yes	yes	yes	—	—	—	—	—	ECC 4
L	—	—	—	—	—	—	—	—	ECC 1

Based on the findings in this SBEBBS, all parcels within the Consolidated Parcels (except Parcels C2b and L) are classified as ECC 4. Parcel L is classified as ECC 1, and Parcel C2b is classified as ECC 5. Therefore, the overall classification of the Consolidated Parcels is ECC 4, and the property is eligible for deed transfer (except Parcel C2b).

An Agency for Toxic Substances and Disease Registry (ATSDR) Basewide Public Health Assessment at Castle Airport was completed in March 1999. This study showed no health risk associated with the proposed transfer by deed as long as access to groundwater is restricted, the integrity of existing remedial systems protected and maintained, access restricted at active IRP and UST sites, and that the probable or known presence of LBP and asbestos is disclosed.

## 7 CERTIFICATION

This Supplement to the BEBS of the Consolidated Parcels, Castle Airport, California, utilized only those techniques, procedures and processes described in this report. The facts and conditions depicted are accurate and are subject to limitations inherent in the investigative techniques used and any expressed limitations in this survey.

I certify that the property conditions stated in this report are based on a thorough review of available records, visual inspections, and sampling and analysis results as noted, and are true and current to the best of my knowledge and belief.

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Signature

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Date

Greg Gangnuss  
BRAC Environmental Coordinator  
AFRPA/DD Castle

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**Table 1-2  
Facility Property Matrix  
Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, and L**  
(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
23 (Classrooms)	A	N-2	1942	11,500	Plume						U	X		7	3
34 (Office)	A	G-1	1941	10,453	Plume						U	X		7	4
35 (Office)	A	G-1	1970	3,039	Plume	H(2)	W(2)				U	X	Physical	7	4
41 (Office)	A	C-4	1942	3,637	Plume			AST-A(2)	Diesel	275	U	X	Physical	7	4
42 (Office)	A	C-4	1942	3,465	Plume						U	X		7	4
44 (Storage)	A	C-4	1987	630	Plume						U			7	4
45 (Office)	A	C-4	1942	9,230	Plume						U	X		7	4
47 (Storage)	A	C-4	1941	34,873	Plume						Y	X		7	4
48 (Vault)	A	Unknown (unable to locate)	1955	210	Plume						U			7	4
54 (Storage)	A	C-4	1944	30,225	Plume			AST-A(2)	Diesel	9	Y	Y	Physical	7	5
								UST-A(7)	Heating Oil	2,000					
56 (Weigh Scale)	A	C-4	1984	700	Plume						U			7	4
57 (Industrial)	A	C-4	1984	64	Plume						U			7	4
59 (Industrial)	A	C-4	1957	1,994	Plume	H(7)	W(7)	UST-A(7)	Waste Oil	100	U	X	Physical	7	2
65 (Industrial)	A	C-4	1949	1,030	Plume	H(2)	W(2)	OWS-I(7)	Waste Oil	40	U	X	Physical	7	4
								UST-A(7)	Diesel	4,000					
								UST-A(7)	Unleaded	8,000					
								UST-R(7)	Waste Oil	10,000					
								UST-R(7)	Waste Oil	5,000					
								UST-R(7)	Waste Oil	5,000					
70 (Fuel Stand)	A	C-4	1956	NA	Plume						N	X		7	4
71 (Industrial)	A	C-4	1952	1,059	Plume			AST-A(2)	Diesel	200	U	X	Physical	7	4
72 (Fuel Tank)	A	C-4	1957	NA	Plume			AST-A(2)	JP-8	400,000	N	X	Physical	7	4
73 (Fuel Tank)	A	C-4	1955	NA	Plume			AST-A(2)	JP-8	500,000	N	X	Physical	7	4
74 (Industrial)	A	C-4	1955	847	Plume			UST-A(6)	JP-4	500	U	X	Physical	7	4

**Table 1-2  
Facility Property Matrix  
Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, and L**  
(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
75 (Fuel Stand)	A	C-4	1955	NA	Plume						N	X	Physical	7	4
76 (Fuel Tank)	A	C-4	1955	NA	Plume			AST-A(6)	JP-8	650,000	N	X	Physical	7	4
78 (Fuel Stand)	A	C-4	1955	NA	Plume						U	X	Physical	7	4
79 (Industrial)	A	C-4	1973	720	Plume			OWS-I(7)	Waste Oil	100	U	X	Physical	7	2
83 (Fuel Tank)	A	C-4	1957	NA	Plume			AST-A(6)	JP-8	650,000	U	X	Physical	7	4
84 (Shop)	A	G-1	1941	4,046	Plume	H(7)	W(7)				U	X	Physical	7	4
88 (Industrial)	A	C-4	1957	3,609	Plume	H(2)	W(7)	OWS-A(7)	Waste Oil	300	U	X	Physical	7	4
								OWS-A(7)	Waste Oil	Unknown					
90 (Office)	A	C-4	1956	2,640	Plume		W(2)				U	X	Physical	7	4
111 (Office)	A	G-1	1941	1,853	Plume						U	X		7	4
115 (Office)	A	G-1	1983	8,504	Plume						U			7	4
118 (Office)	A	G-1	1941	1,856	Plume	H(2)					U	X		7	4
121 (Office)	A	G-1	1941	1,855	Plume						U	X		7	4
122 (Classroom)	A	G-1	1980	1,200	Plume						U			7	4
124 (Classroom)	A	G-1	1980	1,200	Plume						U			7	4
125 (Classroom)	A	G-1	1978	2,400	Plume						U			7	4
127 (Office)	A	G-1	1942	4,720	Plume						U	X		7	4
152 (Office)	A	N-2	1952	6,236	Plume			UST-A(7)	Diesel	550	U	X		7	4
175 (Classroom)	A	N-2	1981	100,976	Plume		W(7)	UST-A(7)	Hydraulic Fluid	150	U		Physical	7	2
								OWS-A(7)	Waste Oil	150					
								OWS-A(7)	Waste Oil	150					
262 (Office)	A	G-1	1962	4,166	Plume						U	X		7	4
324 (Drum storage)	A	G-1	1956		Plume						U			7	4

**Table 1-2  
Facility Property Matrix  
Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, and L**  
(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
325 (Industrial)	A	G-1	1956	22,283	Plume	H(7)	W(7)	OWS-A(7)	Waste Oil	415	Y	X	Physical	7	2
								OWS-A(7)	Waste Oil	415					
								UST-A(7)	Heating Oil	2,000					
								OWS-A(7)	Waste Oil	127					
331 (Office)	A	C-4	1942	1,750	Plume					U	X		7	4	
332 (Office)	A	C-4	1942	1,250	Plume					U	X		7	4	
340 (Industrial)	A	C-4	1989	8,120	Plume	H(2)	W(2)	OWS-A(7)	Waste Oil	350	U		Physical	7	4
								OWS-A(7)	Waste Oil	720					
								UST-A(7)	Waste Oil	350					
351 (Office)	A	G-1	1942	1,750	Plume					U	X		7	4	
411 (Office)	A	G-1	1941	9,307	Plume					U	X		7	4	
501 (Former Pump Station)	A	C-4	Unknown	Unknown	Plume			UST-R(6) (14 each)	JP-4	25,000 (each)	U			7	4
502 (Pump Station)	A	C-4	1949	221	Plume			UST-A(6)	Diesel	12,000	U	X	Physical	7	4
								UST-A(6)	Diesel	12,000					
								UST-I(6)	Waste	1,200					
								UST-A(6)	Unleaded	12,000					
								UST-A(67)	Unleaded	12,000					
505 (Fuel Tank)	A	C-4	1955	NA	Plume			AST-A(2)	MOGAS	12,000	N	X	Physical	7	4
								UST-R(6)	JP-4	25,000					
								(4 each)	JP-4	25,000					
506 (Fuel Stand)	A	C-4	1950	NA	Plume					U	X	Physical	7	4	
508 (Office)	A	C-4	1971	1,600	Plume	H(7)	W(7)	AST-A(2)	Diesel	8	Y	X	Physical	7	2
								OWS-A(7)	Waste Oil	100					
561 (Shop)	A	C-4	1942	2,750	Plume	H(2)				U	X	Physical	7	4	
848 (Office)	A	G-1	1987	70	Plume					U			7	4	

**Table 1-2  
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(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
907 (Waste Treatment)	A	C-4	1950	163	Plume	H(2) P(6)					U	X	Physical	7	4
908 (Shop)	A	C-4	1942	1,972	Plume	H(2) P(6)					U	X	Physical	7	4
909 (Entomology Shop)	A	C-4	1991	2,240	Plume	P(6)		UST-A(6)	Pesticides	4,000	U		Physical	7	2
910 (Waste Treatment)	A	C-4	1954	402	Plume						U	X	Physical	7	4
911 (Waste Treatment)	A	C-4			Plume						U			7	4
912 (Waste Treatment)	A	C-4			Plume						U			7	4
913 (Waste Treatment)	A	C-4			Plume						U			7	4
915 (Waste Treatment)	A	C-4			Plume						U			7	4
916 (Waste Treatment)	A	C-4			Plume						U			7	4
917 (Waste Treatment)	A	C-4	1949	731	Plume	H(7)	W(7)				U	X		7	2
918 (Waste Treatment)	A	C-4	1949		Plume						U			7	4
926 (Waste Treatment)	A	C-4	1952		Plume						U			7	4
928 (Storage)	A	C-4	1952	120	Plume						U	X	Physical	7	4
929 (Former Industrial)	A	C-4	1957	87	Plume			OWS-A(7)	Waste Oil	1,100	U	X	Physical	7	4
								AST-A(2)	Waste Oil	1,000					
949 (Industrial)	A	C-6	1977	1,124			W(2)				U	X	Physical	6	4
950 (Industrial)	A	C-7	1956	2,150	SD-09		W(7)	UST-R(7)	Waste Oil	200	U	X	Physical	7	2
								AST-A(2)	JP-4	2,500					

**Table 1-2  
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(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
951 (Engine Test Stand)	A	C-7	1983	NA			W(7)				U		Physical	7	2
952 (Fuel Tank)	A	C-6	1971	NA	SD-09			AST-A(2)	JP-4	2,500	U	X	Physical	6	4
								OWS-I(7)	Waste Oil	1,200					
953 (Test Stand)	A	C-6	1972	NA	SD-09						U	X	Physical	6	4
956 (Engine Test Cell)	A	C-4	1987	5,516				AST-A(2)	JP-4	2,500	U		Physical	7	4
								OWS-A(7)	Waste Oil	250					
958 (Industrial Treatment)	A	Unknown (unable to locate)	1987	NA				OWS-A(7)	Waste Oil	50	U			7	4
959 (Industrial Treatment)	A	Unknown (unable to locate)	1984	NA							U				4
1197 (Equipment Yard)	A			NA	Plume						U				4
1200 (Office)	A	N-2	1991	82,581	Plume	H(2)	W(2)	AST-A(2)	Diesel	900	U		Physical	7	4
1201 (Industrial)	A	N-5	1991	10,272	Plume	H(7)					U		Physical	7	4
1203 (Storage)	A	N-2	1990	100	Plume, SS-22			UST-R(7)	Diesel	1,000	U		Physical	7	4
1205 (Industrial)	A	Unknown (unable to locate)	1991	49							U			5	3
1207 (Training Support)	A	N-2	1990	192							U		Physical	7	3
1208 (Tennis Court)	A	N-2		NA							U			7	4
1210 (Industrial)	A	N-2	1953	1,820				UST-A(7)	Heating Oil	10,000	Y	X	Physical	7	4
								UST-A(7)	Heating Oil	10,000					
								UST-A(7)	Diesel	15,000					

**Table 1-2  
Facility Property Matrix  
Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, and L**  
(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
1211 (Office)	A	N-2	1953	25,230	Plume						Y	X		7	4
1212 (Office)	A	N-2	1953	25,230							Y	X		7	4
1213 (Office)	A	N-2	1953	14,148			W(2)				Y	X	Physical	7	4
1214 (Office)	A	N-2	1953	25,230							Y	X		7	4
1215 (Dormitory)	A	N-2	1982	25,230							Y			7	4
1216 (Storage)	A	N-1	1974	1,233							U	X		6	4
1217 (Shed)	A	N-1	1974								U				4
1230 (Office)	A	G-1	1953	29,603	Plume			UST-A(7)	Heating Oil	300	Y	X	Physical	7	4
								UST-A(7)	Heating Oil	1,200					
1231 (Generator)	A	G-1	1959	374	Plume			UST-I(7)	Diesel	300	U	X	Physical	7	4
								AST-A(2)	Diesel	275					
1248 (Shop)	A	C-4	1988	12,800	Plume						U		Physical	7	4
1253 (Industrial)	A	C-4	1978	20,160		H(7)	W(7)	UST-A(7)	Heating Oil	12,000	U		Physical	7	5
1260 (Industrial)	A	C-4	1955	32,993	Plume	H(7)	W(7)	OWS-A(7)	Waste Oil	1,000	Y	X	Physical	7	5
								OWS-I(7)	Waste Oil	900					
								UST-A(7)	Heating Oil	3,000					
1263 (Office)	A	C-4	1988	400	Plume						U		Physical	7	4
1264 (Storage)	A	C-4	1988	160	Plume						U		Physical	7	4
1265 (Storage)	A	C-4	1988	204	Plume						U		Physical	7	4
1266 (Storage)	A	C-4	1961	2,835	Plume						U	X	Physical	7	5
1267 (Storage)	A	C-4	1988	390	Plume						U		Physical	7	4
1268 (Storage)	A	C-4	1988	38	Plume						U		Physical	7	4
1269 (Storage)	A	C-4	1988	3,270	Plume						U		Physical	7	4
1270 (Storage)	A	C-4	1988	40,500	Plume						U		Physical	7	4
1305 (Water Well)	A	Unknown (unable to locate)	1990	NA							U				4

**Table 1-2  
Facility Property Matrix  
Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, and L**  
(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
1307 (Industrial)	A	C-4	1957	100							U	X		7	4
1309 (Office)	A	C-4	1957	5,376		H(2)	W(2)	UST-A(7)	Heating Oil	300	Y	X	Physical	7	4
1310 (Industrial)	A	C-4	1957	9,574		H(2)		UST-A(7)	Heating Oil	500	Y	X	Physical	7	4
1311 (Shop)	A	C-4	1957	144	Plume						U	X	Physical	7	4
1312 (Fire Training)	A	C-4	1976	NA	FT-03						U		Physical	7	4
1313 (Storage Tanks)	A	C-4	1982	NA				AST-A(2)	JP-4	5,000	U		Physical	7	4
								AST-A(2)	JP-4	5,000					
								AST-A(2)	Waste Oil	5,000					
								AST-A(2)	Waste Oil	5,000					
								AST-A(2)	JP-4	5,000					
1314 (Office)	A	C-4	1957	375	Plume	H(7)	W(7)				U	X	Physical	7	4
1315 (Office)	A	C-4	1957	9,574				UST-A(7)	Heating Oil	500	Y	X	Physical	7	4
1316 (Storage)	A	C-4	1962	Fenced Area	SD-12, Plume	H(2)	W(7)				U	X	Physical	7	4
1317 (Storage)	A	C-4	1969	147				UST-A(7)	Diesel	3,000	Y	X	Physical	7	4
1318 (Storage)	A	C-4	1969	122							U	X	Physical	7	4
1319 (Industrial)	A	C-4	1969	45,247		H(7)	W(7)	AST-A(2)	Diesel	9	Y	X	Physical	7	3
								UST-A(7)	Heating Oil	5,500					
1320 (Office)	A	C-4	1955	5,376				UST-A(7)	Heating Oil	550	Y	X	Physical	7	4
1321 (Pump Station)	A	C-4	1969	460							U	X	Physical	7	4
1322 (Office)	A	C-4	1957	9,574				UST-A(7)	Heating Oil	500	Y	X	Physical	7	4
1323 (Storage)	A	C-4	1989	6,000									Physical	7	4
1324 (Industrial)	A	C-4	1968	8,000			W(7)	OWS-I(7)	Waste Oil	800	U	X	Physical	7	2

**Table 1-2**  
**Facility Property Matrix**  
**Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, and L**  
(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
1325 (Office and Facility 4204, Tank Farm)	A	C-4	1955	5,376		H(7)	W(7)	UST-A(7)	Heating Oil	700	Y	X	Physical	7	2
								UST-A(7)	MOGAS	5,000					
								UST-A(7)	JP-4	10,000					
								UST-A(7)	JP-8	10,000					
								UST-I(7)	Diesel	10,000					
1326 (Washrack)	A	C-4	1973	2,160						N	X	Physical	7	4	
1327 (Storage)	A	C-4	1989	1,200						U		Physical	7	4	
1330 (Office)	A	C-4	1955	5,371		H(2)	W(2)	AST-A(2)	Diesel	9	Y	X	Physical	7	4
								UST-R(7)	Heating Oil	700					
1332 (Classrooms)	A	C-4	1978	9,569			W(2)	UST-A(7)	Heating Oil	4,000	U		Physical	7	4
1333 (Classrooms)	A	C-4	1956	10,000				UST-A(7)	Heating Oil	860	Y	X	Physical	7	4
1334 (Vault)	A	Unknown (unable to locate)	1956	392							U	X		7	4
1335 (Office)	A	C-4	1955	30,860		H(2)	W(7)	OWS-I(7)	Waste Oil	400	Y	X	Physical	7	3
								UST-A(7)	Heating Oil	2,000					
1336 (Fuel Pump Station)	A	C-4	1991	9,080				OWS-A(7)	Waste Oil	1,000	U		Physical	7	4
								AST-A(2)	Diesel	275					
								UST-A(7)	JP-4	4,000					
1337 (Industrial)	A	C-4	1957	1,764	SS-21			UST-I(6)	JP-4	50,000	U	X	Physical	7	4
								(6 each)							
								UST-I(6)	JP-4	2,000					
1340 (Office)	A	C-4	1953	20,912		H(2)		UST-A(7)	Diesel	300	Y	X	Physical	7	4
								UST-A(7)	Diesel	1,000					
								UST-A(7)	Heating Oil	2,000					

**Table 1-2  
Facility Property Matrix  
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(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
1344 (Fire Department)	A	C-4	1955	12,158		H(7)	W(7)	AST-A(2)	Diesel	275	Y	X	Physical	7	4
								UST-A(7)	Heating Oil	2,000					
1345 (Utility Vault)	A	C-4	1953	2,439				UST-A(7)	Diesel	500	U	X	Physical	7	4
1346 (Water Storage)	A	C-4	1954	NA							U	X		7	4
1347 (Shop)	A	C-4	1954	1,607				AST-A (2)	Diesel	320	U	X	Physical	7	4
							(4 each)								
1348 (Industrial)	A	C-4	1957	1,764	SS-17			UST-I (6)	JP-4	50,000	U		Physical	7	4
								(6 each)							
								UST-I (6)	JP-4	2,000					
1350 (Hangar)	A	C-4	1954	191,576	Plume	H(7)	W(7)	UST-A (7)	Heating Oil	25,000	Y	X	Physical	7	4
								UST-A (7)	Heating Oil	25,000					
1353 (Hangar)	A	C-4	1957	11,688							U	X	Physical	7	4
1354 (Hangar)	A	C-4	1957	11,688			W(2)				U	X	Physical	7	4
1356 (Hangar)	A	C-4	1957	11,688	Plume						U	X	Physical	7	4
1359 (Vault)	A	Unknown (unable to locate)	1953	441	Plume						U	X		7	4
1360 (Storage)	A	C-4	1953	72,991				AST-A (2)	Diesel	7	Y	X	Physical	7	4
								UST-A (7)	Heating Oil	2,000					
1401 (Fuel Pump Station)	A	A-4	1953	3,096	SS-18			UST-I (6)	JP-4	20,000	U	X	Physical	7	4
								UST-I (6)	JP-4	25,000					
								(9 each)							
								UST-R (6)	JP-4	2,000					
1402 (Fuel Pump Station)	A	A-4	1953	2,461	SS-18			UST-R (6)	JP-4	50,000	U	X	Physical	7	4
								(5 each)							
								UST-R (6)	JP-4	2,000					

**Table 1-2  
Facility Property Matrix  
Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, and L**  
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Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
1403 (Fuel Pump Station)	A	A-4	1953	3,096	SS-17			UST-R (6)	JP-4	20,000	U	X	Physical	7	4
								UST-R (6)	JP-4	25,000					
								(9 each)							
								UST-R (6)	JP-4	2,000					
1404 (Storage)	A	A-4	1969	3,933			W(7)	UST-A (7)	Heating Oil	800	Y	X	Physical	7	3
1405 (Shop)	A	A-4	1969	2,080				UST-A (7)	Heating Oil	500	Y	X	Physical	7	3
1406 (Septic Tank)	A	A-4	1974	NA							U			7	4
1407 (Septic Tank)	A	A-4	1978	NA							U			7	4
1454 (Unknown)	A	Unknown (unable to locate)	Unknown	Unknown				OWS-I (7)	Waste Oil	4,000	U			7	4
1456 (Industrial)	A	Unknown (unable to locate)	1970	256				OWS-I (7)	Waste Oil	3,366	U	X	Physical	7	4
1509 (Industrial)	A	C-4	1984	21,335			W(2)	OWS-A(7)	Waste Fuel	Unknown	U		Physical	7	4
								OWS-A(7)	Waste Fuel	300					
								UST-A(7)	Heating Oil	5,000					
1521 (Storage)	A	C-4	1955	340	Plume		W(7)	AST-A (2)	Aircraft Soap	8,000	Y	X	Physical	7	5
								AST-I (2)	Unknown	10,000					
1522 (Unknown)	A	Unknown (unable to locate)	Unknown	Unknown				OWS-A(7)	Waste Oil	8,600	U				4
1523 (Oil Recovery Unit)	A	C-4	1984	NA	SD-13, Plume			AST-U (2)	Waste Oil	4000	U		Physical	7	5
								OWS-I (7)	Waste Oil	8,000					
1524 (Storage)	A	C-4	1984	625	Plume						U		Physical	7	5
1526 (Storage)	A	C-4	1981	625	Plume						U		Physical	7	5

**Table 1-2  
Facility Property Matrix  
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Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
1529 (Industrial)	A	C-4	1987	35,973	Plume	H(7)					U		Physical	7	3
1530 (Pump House)	A	C-4	1987	105	Plume			AST-A (2)	Aircraft Soap	10000	U		Physical	7	4
								AST-I (2)	Unknown	10,000					
1532 (Shop)	A	C-4	1961	12,092	Plume	H(7)	W(7)	UST-A (7)	Heating Oil	1000	Y	X	Physical	7	4
								AST-U (2)	Aircraft Soap	10,000					
1535 (Classrooms)	A	C-4	1957	2,434	Plume			AST-A (2)	Diesel	9	U	X		7	4
1540 (Office)	A	C-4	1956	11,555	Plume						Y	X	Physical	7	4
1541 (Storage)	A	C-4	1974	3,694			W(7)	OWS-I (7)	Waste Oil	700	U	X	Physical	7	4
1543 (Storage)	A	C-4	1974	160							U	X		7	4
1545 (Office)	A	C-4	1955	10,414	Plume	H(2)					Y	X	Physical	7	4
1548 (Office)	A	C-4	1966	1,280	Plume						U	X	Physical	7	4
1550 (Industrial)	A	C-4	1956	32,291	Plume, SD-16		W(7)	AST-A (2)	Diesel	9	Y	X	Physical	7	4
								UST-A (7)	Heating Oil	5,500					
1552 (Industrial)	A	C-4	1974	1,233				OWS-I (7)	Waste Oil	5,200	U	X	Physical	7	4
1555 (Storage)	A	C-4	1961	1,800	Plume						U	X	Physical	7	4
1556 (Storage)	A	C-4	1974	1,200	Plume						U	X		7	4
1560 (Storage)	A	C-4	1955	21,872				UST-I (7)	Diesel	550	Y	X	Physical	7	2
								AST-A (2)	Diesel	107					
1561 (Office)	A	C-4	1975	2,538	Plume						U	X	Physical	7	4
1562 (Office)	A	C-4	1958	2,400	Plume		W(7)				U	X	Physical	7	3
1564 (Office)	A	C-4	1974	800	Plume						U	X		7	4
1566 (Storage)	A	C-4	1959	2,400	Plume						U	X	Physical	7	4
1567 (Industrial)	A	C-4	1959	672	Plume			UST-R (7)	MOGAS	5,243	U	X	Physical	7	4
1568 (Office)	A	C-4	1959	80	Plume						U	X		7	4
1569 (Shed)	A	C-4	1959	800	Plume						U	X		7	4
1571 (Washrack)	A	C-4	Unknown	NA				OWS-I (7)	Waste Oil	525	U		Physical	7	3

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Facility Property Matrix  
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Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
1572 (Storage)	A	C-4	1979	192							U		Physical	7	4
1576 (Guard Tower)	A	C-4	1979	NA	Plume			AST-A (2)	Diesel	60	U		Physical	7	4
1577 (Vault)	A	C-4	1979	30							U			7	4
1580 (Industrial)	A	Unknown (unable to locate)	1975	20							U	X			4
1582 (Storage)	A	C-4	1960	19,050				AST-A (2)	Diesel	275	Y	X	Physical	7	4
							UST-A (7)	Heating Oil	1,500						
1583 (Vault)	A	C-4	1960	416							U	X		7	4
1584 (Storage Tank)	A	C-4	1990	NA				AST-A (2)	Diesel	500	U		Physical	7	4
1585 (Generator)	A	C-4	1972	NA				AST-A (2)	Diesel	500	U		Physical	7	4
1586 (Office)	A	C-4	1960	80							U	X		7	4
1588 (Vault)	A	A-4	1960	106							U	X		7	4
1593 (Tennis Court)	A	C-6	1980	NA							U			6	4
1596 (Office)	A	C-6	1980	1,929							U			6	4
1611 (Navigational Aid)	A			NA							U			7	4
1701 (Navigational Aid)	A	A-4	1979	NA				AST-A (2)	Diesel	14	U		Physical	7	4
1704 (Navigational Aid)	A	A-4	1958	NA							U			7	4
1705 (Navigational Aid)	A	A-4	1958	NA							U			7	4
1707 (Generator)	A	A-4	1954	NA				AST-A (2)	Diesel	9	U		Physical	7	4
1708 (Navigational Aid)	A	A-4	1956	NA				AST-A (2)	Diesel	275	U		Physical	7	4

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Facility Property Matrix  
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(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
1903 (Equipment)	A	A-4	1979	NA							U			7	4
1904 (Vault)	A	Unknown (unable to locate)	1957	360							U	X			4
1905 (Navigational Aid)	A	A-6	1957	438				UST-A (7)	Diesel	300	U	X	Physical	7	4
1906 (Navigational Aid)	A	A-3	1976	NA				AST-A (2)	Diesel	14	U			2	4
1907 (Generator)	A	A-2	1956	NA				AST-A (2)	Diesel	14	Y			2	4
4106 (Fuel stand)	A	C-4	1964	NA							U			7	4
4112 (Fuel Tank)	A	C-4	1964	NA				AST-I (2)	JP-7	420,000	U	X	Physical	7	4
4114 (Fuel Tank)	A	C-4	1964	NA				AST-I (2)	JP-7	420,000	U	X	Physical	7	4
4130 (Fuel Tank)	A	C-4	1991	NA				AST-A (2)	JP-4	600,000	U		Physical	7	4
4141 (Fuel Tank)	A	C-4	1991	NA				AST-A (2)	JP-4	600,000	U		Physical	7	4
4204 (Fuel Stand)	A	C-4	1968	1,600							U	X			4
11059 (Washrack)	A	C-4	1955	NA	SD-13									7	4
618 (Sewage Pump Station)	C1	Q-1	1944	192	Plume						U	X		6	4
653 (Office)	C1	Q-1	1943	1,040							U	X		6	4
675 (Recreation)	C1	Q-1	1981		Plume						U			6	4
680 (Recreation)	C1	Q-1	1982	11,221	Plume						Y			6	4
681 (Baseball Field)	C1	Q-1	1966	NA	Plume						U			6	4
682 (Baseball Field)	C1	Q-1	1966	NA	Plume						U			6	4
683 (Soccer Field)	C1	Q-1	1966	NA	Plume						U			6	4

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Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
687 (Tennis Court)	C1	Q-1	1966	NA	Plume						U			6	4
1041 (Office)	C2a	L-1	1961	5,310	Plume						U	X		5	4
1042 (Museum)	C2a	L-1	1961	5,310	Plume						U	X		5	4
1045 (Storage)	C2a	L-1	1942	1,500	Plume						U	X		5	4
1140 (Modular Office)	C2a	N-2	Unknown	Unknown	Plume						U	X	Physical	7	4
1188 (Incinerator)	C2a	M-2	1988	NA	Plume						N			5	4
1190 (Electrical)	C2a	M-2	1988	NA	Plume						U			5	4
51 (Storage)	C2b	C-4	1941	24,696	Plume	H(7)	W(7)				Y	Y	Physical	7	5
1180 (Industrial)	E	M-2	1964	117	Plume						U	X		7	4
1182 (Hospital)	E	M-2	1964	124,289	Plume	H(7), M(2)	W(7)	UST-A(7)	Heating Oil	10,000	Y	X	Physical	7	4
								UST-A(7)	Heating Oil	20,000					
1183 (Vault)	E	M-2	1964	990	Plume						U			7	4
1185 (Office)	E	M-2	1975	355	Plume						U	X		7	4
1186 (Shop)	E	M-2	1966	853	Plume						U	X	Physical	7	4
1187 (Storage)	E	M-2	1967	375	Plume						U	X	Physical	7	4
52 (Platform)	F1	C-4	1986	800	Plume						U			7	5
271 (Office)	F1	J-1	1941	3,747	Plume						U	X		7	4
290 (Tennis Court)	F1										NA		Physical	7	4
300 (Dormitory)	F1	I-1	1986	27,376	Plume						U			7	4
315 (Recreation)	F1	I-1	1990	8,400	Plume						U			7	4
316 (Dormitory)	F1	I-1	1990	23,760	Plume						U			7	4
317 (Dormitory)	F1	I-1	1990	23,175	Plume						U			7	4
318 (Dormitory)	F1	I-1	1990	23,760	Plume						U			7	4

**Table 1-2  
Facility Property Matrix  
Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, and L**  
(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
360 (Dining Facility)	F1	I-1	1958	14,426	Plume, SS-27			AST-R(2)	Diesel	275	Y	X	Physical	7	4
								UST-A(7)	Heating Oil	10,000					
								UST-A(7)	Heating Oil	20,000					
362 (Dining Facility)	F1	I-1	1991	15,000	Plume						U			7	4
372 (Dormitory)	F1	I-1	1971	10,944	Plume						U	X		7	4
373 (Dormitory)	F1	I-1	1971	10,056	Plume						U	X		7	4
393 (Recreation)	F1	G-1	1942	6,825	Plume						U	X		7	4
394 (Recreation)	F1	G-1	1952	840	Plume						U	X		7	4
395 (Recreation)	F1	G-1	1956	17,910	Plume			UST-A(7)	Heating Oil	1,000	Y	X	Physical	7	4
398 (Recreation)	F1	G-1	1959	440	Plume						U	X		7	4
403 (Recreation)	F1	G-1	1953	840	Plume						U	X		7	4
404 (Dining Facility)	F1	G-1	1948	20,378	Plume						Y	X	Physical	7	4
405 (Recreation)	F1	G-1	1948	2,700	Plume						U	X		7	4
409 (Recreation)	F1	G-1	1958	264	Plume						U	X		7	4
465 (School)	F1	G-1	1982	10,738	Plume						U			7	4
467 (School)	F1	G-1	1986	1,440	Plume						U			7	4
470 (Dormitory)	F1	I-1	1986	33,712	Plume						U			7	4
480 (Dormitory)	F1	I-1	1958	25,730	Plume						Y	X		7	4
482 (Dormitory)	F1	I-1	1958	25,730	Plume						Y	X		7	4
551 (Shop)	F1	G-1	1941	7,124	Plume	H(2)	W(7)	UST	Waste Oil	3000	U	X	Physical	7	4
553 (Shop)	F1	G-1	1942	977	Plume						U	X	Physical	7	4
554 (Shop)	F1	G-1	1942	1,482	Plume	H(2)		OWS-A(7)	Waste Oil	300	U	X	Physical	7	4
556 (Shop)	F1	G-1	1942	3,108	Plume	H(2)					U	X	Physical	7	4
860 (Softball Field)	F2	F-2	1981	NA	Plume						U			6	4
871 (Gymnasium)	F2	F-2	1981	22,985	Plume			UST-A(7)	Heating Oil	8,000	U		Physical	6	4

**Table 1-2**  
**Facility Property Matrix**  
**Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, and L**  
(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
936 (Holding Ponds)	F2	F-2	1978	NA	Plume						U		Physical	6	4
535 (Storage)	F3	C-4	1942	20,515	Plume	H(2)					U	X		7	4
538 (Platform)	F3	C-4	1948	602	Plume						U			7	4
255 (Office)	G1DK	K-1	1942	4,612	Plume						U	X		7	4
256 (Dining Facility)	G1DK	K-1	1942	17,523	Plume						Y	X		7	4
421 (Office)	G1DK	O-1	1941	2,265	Plume						U	X		7	4
422 (Library)	G1DK	O-1	1967	7,170	Plume						U	X		7	4
425 (Shopette)	G1DK	O-1	1984	3,185	Plume						U		Physical	7	4
427 (Visiting Officers Quarters [VOQ])	G1DK	O-1	1968	16,992	Plume						U	X		7	4
428 (VOQ)	G1DK	O-1	1976	9,360	Plume						U	X		7	4
429 (VOQ)	G1DK	O-1	1976	9,360	Plume						U	X		7	4
432 (Recreation)	G1DK	O-1	1982	2,299	Plume						U			7	4
438 (VOQ)	G1DK	O-1	1976	9,360	Plume						U	X		7	4
439 (VOQ)	G1DK	O-1	1976	9,360	Plume						U	X		7	4
443 (Shop)	G1DK	O-1	1941	2,187	Plume	H(2)		UST-A(7)	Heating Oil	12,000	Y	X	Physical	7	4
445 (Storage)	G1DK	O-1	1941	4,468	Plume	H(2)					U	X	Physical	7	4
447 (Office)	G1DK	O-1	1942	4,302	Plume						Y	X		7	4
448 (Storage)	G1DK	O-1	1948	224	Plume						U	X	Physical	7	4
1003 (Storage)	G1DK	O-1	1956	3,947	Plume						U	X		7	4
1005 (Classrooms)	G1DK	O-1	1955	27,712	Plume	H(2)					Y	X	Physical	7	4
1007 (Storage)	G1DK	O-1	1957	6,565	Plume	H(2)	W(2)				Y	X		7	4
1009 (Water Well)	G1DK	O-1	1984	NA	Plume						U			7	4

**Table 1-2  
Facility Property Matrix  
Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, and L**  
(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
1015 (Classrooms)	G1DK	O-1	1974	54,757	Plume			UST-A(7)	Heating Oil	1,000	Y	X	Physical	7	4
1038 (Chapel)	G1DK	O-1	1982	16,345	Plume			UST-A(7)	Heating Oil	2,000	U		Physical	7	4
1101 (VOQ)	G1DK	N-2	1948	3,610	Plume						Y	X		7	4
1102 (VOQ)	G1DK	N-2	1948	3,610	Plume						U	X		7	4
1103 (VOQ)	G1DK	N-2	1976	9,360	Plume						Y	X		7	4
1104 (VOQ)	G1DK	N-2	1976	9,360	Plume						U	X		7	4
1105 (VOQ)	G1DK	N-2	1976	9,360	Plume						U	X		7	4
1106 (VOQ)	G1DK	N-2	1976	9,360	Plume						U	X		7	4
1108 (Office)	G1DK	N-2	1948	3,610	Plume						Y	X		7	4
1109 (VOQ)	G1DK	N-2	1948	3,610							Y	X		7	4
1111 (Dormitory)	G1DK	N-2	1948	3,610							Y	X		7	4
1112 (Dormitory)	G1DK	N-2	1948	3,610							Y	X		7	4
1113 (Dormitory)	G1DK	N-2	1948	3,610							Y	X		7	4
1114 (Dormitory)	G1DK	N-2	1948	3,610							Y	X		7	4
1115 (Dormitory)	G1DK	N-2	1948	3,610							Y	X		7	4
1116 (Temporary Living Facility)	G1DK	N-2	1948	3,610							Y	X		7	4
1117 (Temporary Living Facility)	G1DK	N-2	1948	3,610							Y	X		7	4
1118 (Dormitory)	G1DK	N-2	1948	3,610							Y	X		7	4
1119 (Dormitory)	G1DK	N-2	1948	3,610							Y	X		7	4
1121 (Office)	G1DK	N-2	1948	3,610							Y	X		7	4
1122 (Office)	G1DK	N-2	1948	3,610							Y	X		7	4
1123 (Office)	G1DK	N-2	1948	3,610							Y	X		7	4
1124 (Classroom)	G1DK	N-2	1948	3,610							Y	X		7	4
1131 (Dormitory)	G1DK	N-2	1948	3,610							Y	X		7	4
1132 (Office)	G1DK	N-2	1948	3,610							Y	X		7	4

**Table 1-2  
Facility Property Matrix  
Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, and L**  
(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
415 (Tennis Court)	G2			NA	Plume						U			7	4
541 (Storage)	G2	G-1	1955	2,688	Plume	H(7)	W(7)				U	X	Physical	7	4
544 (Storage)	G2	G-1	1942	5,578	Plume						U			7	4
545 (Office)	G2	G-1	1942	10,923	Plume	H(7)	W(7)	AST-A(2)	Diesel	55	U	X		7	4
550 (Shed)	G2	G-1	1952	800	Plume						U	X	Physical	7	4
704 (Water Tank)	G2	G-1	1949	NA	Plume			AST-A(2)	Diesel	9	U	X		7	4
705 (Shed)	G2	G-1	1949	440	Plume						U	X		7	4
706 (Water Tank)	G2	G-1	1953	NA	Plume						U	X		7	4
708 (Office)	G2	G-1	1943	5,128	Plume, SS-20						U	X	Physical	7	4
728 (Store)	G2	G-1	1983	1,520	Plume						U			7	4
736 (Shed)	G2	Unknown (unable to locate)	1949	2,625	Plume						U	X			4
748 (Storage)	G2	G-1	1984	2,746	Plume						U		Physical	7	4
752 (Storage)	G2	G-1	1959	22,760	Plume			AST-R(2)	Diesel	9	Y	X	Physical	7	4
								UST-A(7)	Heating Oil	8,000					
759 (BX Store)	G2	G-1	1978	52,482	Plume			UST-A(7)	Heating Oil	4000	U		Physical	7	4
								AST-A(7)	Diesel	3,000					
765 (Commissary)	G2	G-1	1990	82,360	Plume			AST-A(2)	Diesel	9	U			7	4
								AST-A(2)	Diesel	9					
785 (Industrial)	G2	G-1	1955	2,811	Plume			UST-A(7)	MOGAS	10,000	U	X	Physical	7	4
								UST-A(7)	MOGAS	10,000					
								UST-A(7)	MOGAS	10,000					
786 (Theater)	G2	G-1	1956	9,071	Plume			UST-A(7)	Heating Oil	400	Y	X	Physical	7	4
789 (Bowling)	G2	G-1	1970	13,771	Plume			UST-A(7)	Heating Oil	500	Y	X	Physical	7	4

**Table 1-2  
Facility Property Matrix  
Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, and L**  
(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
850 (Storage)	G3	C-4	1952	6,540	Plume, SD-11	H(2)		OWS-I(7)	Waste Oil	500	U	X	Physical	7	4
851 (Storage)	G3	F-2	1965	4,000	Plume	H(7), P(2)	W(7)	AST-A(2)	Diesel	43	U	X	Physical	7	4
								AST-A(2)	Diesel	43					
								AST-A(2)	Unknown	500					
855 (Storage)	G3	C-4	1986	923	Plume, SS-25						U			7	4
521 (Storage)	G5	C-4	1941	2,753	Plume						U	X		7	4
522 (Storage)	G5	C-4	1942	2,753	Plume						U	X	Physical	7	4
523 (Storage)	G5	C-4	1952	3,145	Plume						U	X		7	4
525 (Storage)	G5	C-4	1941	679	Plume						U	X		7	4
527 (Industrial)	G5	C-4	1975	84	Plume						U	X		7	4
531 (Storage)	G5	C-4	1941	9,581	Plume						U	X	Physical	7	4
532 (Storage)	G5	C-4	1941	9,531	Plume						U	X	Physical	7	4
533 (Storage)	G5	C-4	1941	9,490	Plume						U	X	Physical	7	4
534 (Storage)	G5	C-4	1941	2,736	Plume						U	X	Physical	7	4
536 (Storage)	G5	C-4	1990	600	Plume						U	X	Physical	7	4
537 (Storage)	G5	C-4	1943	9,325	Plume						Y	X	Physical	7	4
806 (Animal Clinic)	G5	C-4	1957	1,621	Plume	H(2)					U	X		7	4
717 (Water Well)	G6	G-1	1949	165	Plume						U	X		7	4
781 (Office)	G6	O-1	1987	40	Plume						U			7	4
782 (Office)	G6	G-1	1987	400	Plume						U			7	4
783 (Industrial)	G6	Unknown (unable to locate)	1989	29	Plume						U				4
1110 (VOQ)	G6	M-1	1976	9,360	Plume						U	X		5	4
1146 (VOQ)	G6	M-1	1976	9,360	Plume						U	X		5	4

**Table 1-2  
Facility Property Matrix  
Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3, G4, G5, G6, H2, I, and L**  
(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
1147 (VOQ)	G6	M-1	1976	9,360	Plume						U	X		5	4
264 (Office)	H2	G-1	1942	2,305	Plume						U	X		7	4
265 (Office)	H2	G-1	1941	2,716	Plume						U	X		7	4
1107 (VOQ)	H2	M-1	1976	9,360	Plume						U	X		5	4
730 (Office)	I	G-1	1989	1,300	Plume						U		Physical	7	4
9204 (Industrial)		Unknown (unable to locate)	1960	100							U	X			4

**Notes**

Parcel column added for location of facilities.

- |       |   |     |   |
|-------|---|-----|---|
| A     | active  | OWS | oil/water separator                                       |
| ACM   | asbestos-containing material                                      | P   | facility use included storage of pesticides.              |
| AST   | aboveground storage tank  | POL | petroleum, oils, and lubricants                           |
| ECC   | Environmental Condition Category                                  | R   | removed   |
| H     | facility usage included storage of hazardous materials            | U   | unknown status  |
| I     | inactive or closed in place                                       | UST | underground storage tank                                  |
| M     | medical/biohazardous waste generated within the facility          | W   | facility where hazardous wastes were generated or stored. |
| MOGAS | motor gasoline  | X   | facility was constructed prior to or during 1978.         |
| N     | no suspected acm identified, or facility type excludes use of acm | Y   | yes   |
| NA    | not applicable  |     |   |

*ECC Property Categories (1993)*

- 2 Storage of hazardous substances/petroleum products, but no releases occurred
- 5 Additional remedial actions are required
- 6 Required remedial actions have not been taken
- 7 Site requires evaluation

*ECC Property Categories (2003)*

- 2 Only petroleum products have been disposed or released
- 3 No remedial action required
- 4 Remedial actions have been completed
- 5 Remedial actions are in progress

**Table 1-3  
 Parcel J1b Facilities**

<b>Facility</b>	<b>Type of Facility</b>	<b>Year of Construction</b>	<b>Square Footage</b>
3000	Housing (Single)	1958	2,385
3001	Housing (Single)	1958	2,045
3002	Housing (Single)	1958	2,049
3003	Housing (Single)	1958	1,940
3004	Housing (Single)	1958	2,036
3005	Housing (Single)	1958	1,479
3006	Housing (Single)	1958	1,185
3007	Housing (Single)	1958	1,877
3008	Housing (Single)	1958	1,877
3009	Housing (Duplex)	1958	2,072
3010	Housing (Duplex)	1958	2,205
3011	Housing (Single)	1958	1,877
3012	Housing (Duplex)	1958	2,378
3013	Housing (Duplex)	1958	2,401
3014	Housing (Duplex)	1958	2,378
3015	Housing (Duplex)	1958	2,424
3016	Housing (Duplex)	1958	2,378
3017	Housing (Single)	1958	1,479
3018	Housing (Duplex)	1958	2,378
3019	Housing (Duplex)	1958	2,401
3020	Housing (Duplex)	1958	2,378
3021	Housing (Duplex)	1958	2,424
3022	Housing (Duplex)	1958	2,378
3023	Housing (Duplex)	1958	2,401
3024	Housing (Duplex)	1958	2,378
3025	Housing (Duplex)	1958	2,424
3026	Housing (Single)	1958	1,479
3027	Housing (Single)	1958	1,185
3028	Housing (Single)	1958	1,185
3029	Housing (Single)	1958	1,511
3030	Housing (Single)	1958	1,185
3031	Housing (Single)	1958	1,185
3032	Housing (Single)	1958	1,185
3033	Housing (Single)	1958	1,185
3034	Housing (Duplex)	1958	2,424
3035	Housing (Duplex)	1958	2,378
3036	Housing (Duplex)	1958	2,424
3037	Housing (Duplex)	1958	2,378
3038	Housing (Duplex)	1958	2,401
3039	Housing (Single)	1958	1,185
3040	Housing (Single)	1958	1,185
3041	Housing (Single)	1958	1,185
3042	Housing (Duplex)	1958	2,378
3043	Housing (Duplex)	1958	2,378
3044	Housing (Duplex)	1958	2,378
3045	Housing (Single)	1958	1,185
3046	Housing (Single)	1958	1,185
3047	Housing (Single)	1958	1,479
3048	Housing (Duplex)	1958	2,401

**Table 1-3  
 Parcel J1b Facilities**

Facility	Type of Facility	Year of Construction	Square Footage
3049	Housing (Duplex)	1958	2,205
3050	Housing (Single)	1958	1,877
3051	Housing (Duplex)	1958	2,378
3052	Housing (Duplex)	1958	2,758
3100	Housing (Single)	1958	1,185
3101	Housing (Single)	1958	1,185
3102	Housing (Single)	1958	1,185
3103	Housing (Single)	1958	1,479
3104	Housing (Duplex)	1958	2,378
3105	Housing (Duplex)	1958	2,378
3106	Housing (Duplex)	1958	2,378
3107	Housing (Duplex)	1958	2,378
3108	Housing (Duplex)	1958	2,378
3109	Housing (Duplex)	1958	2,205
3110	Housing (Single)	1958	2,079
3111	Housing (Duplex)	1958	2,378
3112	Housing (Duplex)	1958	2,378
3113	Housing (Duplex)	1958	2,378
3114	Housing (Duplex)	1958	2,378
3115	Housing (Duplex)	1958	2,378
3116	Housing (Single)	1958	1,185
3117	Housing (Single)	1958	1,479
3118	Housing (Single)	1958	1,185
3119	Housing (Single)	1958	1,185
3200	Housing (Duplex)	1958	2,032
3201	Housing (Single)	1958	1,185
3202	Housing (Single)	1958	1,185
3203	Housing (Single)	1958	1,479
3204	Housing (Single)	1958	1,185
3205	Housing (Duplex)	1958	2,032
3206	Housing (Duplex)	1958	2,032
3207	Housing (Duplex)	1958	2,032
3208	Housing (Duplex)	1958	2,378
3209	Housing (Single)	1958	1,185
3210	Housing (Duplex)	1958	2,032
3211	Housing (Duplex)	1958	2,032
3212	Housing (Duplex)	1958	2,032
3213	Housing (Duplex)	1958	2,032
3214	Housing (Duplex)	1958	2,032
3215	Housing (Duplex)	1958	2,032
3216	Housing (Single)	1958	1,185
3217	Housing (Single)	1958	1,185
3218	Housing (Single)	1958	1,185
3219	Housing (Single)	1958	1,185
3220	Housing (Duplex)	1958	2,032
3221	Housing (Duplex)	1958	2,032
3222	Housing (Duplex)	1958	2,032
3223	Housing (Single)	1958	1,185
3224	Housing (Single)	1958	1,479

**Table 1-3  
 Parcel J1b Facilities**

<b>Facility</b>	<b>Type of Facility</b>	<b>Year of Construction</b>	<b>Square Footage</b>
3225	Housing (Single)	1958	1,185
3226	Housing (Duplex)	1958	2,032
3227	Housing (Duplex)	1958	2,032
3228	Housing (Duplex)	1958	2,032
3229	Housing (Duplex)	1958	2,032
3230	Housing (Duplex)	1958	2,032
3231	Housing (Duplex)	1958	2,032
3232	Housing (Single)	1958	1,185
3233	Housing (Single)	1958	1,185
3234	Housing (Single)	1958	1,479
3235	Housing (Single)	1958	1,185
3236	Housing (Duplex)	1958	2,032
3237	Housing (Duplex)	1958	2,032
3238	Housing (Duplex)	1958	2,032
3239	Housing (Single)	1958	1,185
3240	Housing (Duplex)	1958	2,032
3241	Housing (Duplex)	1958	2,032
3242	Housing (Duplex)	1958	2,032
3243	Housing (Duplex)	1958	2,032
3244	Housing (Duplex)	1958	2,032
3245	Housing (Duplex)	1958	2,032
3246	Housing (Duplex)	1958	2,032
3247	Housing (Single)	1958	1,185
3248	Housing (Single)	1958	1,185
3249	Housing (Single)	1958	1,185
3250	Housing (Single)	1958	1,185
3251	Housing (Duplex)	1958	2,032
3252	Housing (Duplex)	1958	2,032
3253	Housing (Duplex)	1958	2,032
3254	Housing (Single)	1958	1,185
3255	Housing (Single)	1958	1,479
3256	Housing (Single)	1958	1,185
3257	Housing (Duplex)	1958	2,032
3258	Housing (Duplex)	1958	2,032
3259	Housing (Duplex)	1958	2,032
3260	Housing (Duplex)	1958	2,032
3261	Housing (Duplex)	1958	2,032
3300	Housing (Duplex)	1958	2,854
3301	Housing (Duplex)	1958	2,715
3302	Maintenance Shop	1952	1,512
3303	Housing (Duplex)	1958	2,854
3304	Housing (Duplex)	1958	1,959
3305	Housing (Duplex)	1958	1,786
3306	Housing (Duplex)	1958	2,316
3307	Housing (Duplex)	1958	2,050
3308	Housing (Duplex)	1958	2,582
3309	Housing (Duplex)	1958	2,316
3310	Housing (Duplex)	1958	2,155
3311	Housing (Duplex)	1958	1,786

**Table 1-3  
 Parcel J1b Facilities**

Facility	Type of Facility	Year of Construction	Square Footage
3312	Housing (Duplex)	1958	1,786
3313	Housing (Duplex)	1958	2,050
3314	Housing (Duplex)	1958	1,959
3315	Housing (Duplex)	1958	2,050
3316	Housing (Duplex)	1958	2,316
3317	Housing (Duplex)	1958	2,050
3318	Housing (Duplex)	1958	1,959
3319	Housing (Duplex)	1958	2,050
3320	Housing (Duplex)	1958	2,132
3321	Housing (Duplex)	1958	2,050
3322	Housing (Duplex)	1958	2,155
3323	Housing (Duplex)	1958	1,959
3324	Housing (Duplex)	1958	2,155
3325	Housing (Duplex)	1958	2,854
3326	Housing (Duplex)	1958	2,456
3327	Housing (Duplex)	1958	2,368
3328	Housing (Duplex)	1958	2,687
3329	Housing (Duplex)	1958	2,755
3330	Housing (Duplex)	1958	2,456
3331	Housing (Duplex)	1958	2,368
3332	Housing (Duplex)	1958	2,029
3333	Housing (Duplex)	1958	2,687
3334	Housing (Duplex)	1958	2,755
3335	Housing (Duplex)	1958	2,417
3336	Housing (Duplex)	1958	2,206
3337	Housing (Duplex)	1958	2,336
3338	Housing (Duplex)	1958	2,206
3339	Housing (Duplex)	1958	2,206
3340	Housing (Duplex)	1958	2,456
3341	Housing (Duplex)	1958	2,687
3342	Housing (Duplex)	1958	2,368
3343	Housing (Duplex)	1958	2,456
3344	Housing (Duplex)	1958	2,755
3345	Housing (Duplex)	1958	2,029
3346	Housing (Duplex)	1958	2,368
3347	Housing (Duplex)	1958	2,456
3348	Housing (Duplex)	1958	2,417
3349	Housing (Duplex)	1958	2,206
3350	Housing (Duplex)	1958	2,417
3351	Housing (Duplex)	1958	2,687
3352	Housing (Duplex)	1958	2,368
3353	Housing (Duplex)	1958	2,368
3354	Housing (Duplex)	1958	2,029
3355	Housing (Duplex)	1958	2,368
3356	Housing (Duplex)	1958	2,029
3357	Housing (Duplex)	1958	2,368
3358	Housing (Duplex)	1958	2,029
3359	Housing (Duplex)	1958	2,368
3360	Housing (Duplex)	1958	2,029

**Table 1-3  
 Parcel J1b Facilities**

Facility	Type of Facility	Year of Construction	Square Footage
3361	Housing (Duplex)	1958	2,368
3362	Housing (Duplex)	1958	2,029
3363	Housing (Duplex)	1958	2,368
3364	Housing (Duplex)	1958	2,206
3365	Housing (Duplex)	1958	2,206
3372	Maintenance Shop	1952	1,512
3400	Housing (Duplex)	1958	1,959
3401	Housing (Duplex)	1958	2,155
3402	Housing (Duplex)	1958	1,786
3403	Housing (Duplex)	1958	2,132
3404	Housing (Duplex)	1958	1,786
3405	Housing (Duplex)	1958	2,132
3406	Housing (Duplex)	1958	1,786
3407	Housing (Duplex)	1958	2,132
3408	Housing (Duplex)	1958	1,786
3409	Housing (Duplex)	1958	2,132
3410	Housing (Duplex)	1958	2,155
3418	Housing (Duplex)	1958	1,969
3419	Housing (Duplex)	1958	2,142
3420	Housing (Duplex)	1958	1,796
3421	Housing (Duplex)	1958	2,142
3422	Housing (Duplex)	1958	1,796
3423	Housing (Duplex)	1958	2,142
3424	Housing (Duplex)	1958	1,796
3425	Housing (Duplex)	1958	2,142
3426	Housing (Duplex)	1958	2,042
3427	Housing (Duplex)	1958	2,072
3472	Sanitary Sewer Pump Station	1952	96
3474	Storm Drain Pump Station	1952	36
3500	Housing (Duplex)	1958	2,456
3501	Housing (Duplex)	1958	2,368
3502	Housing (Duplex)	1958	2,206
3503	Housing (Duplex)	1958	2,755
3524	Housing (Duplex)	1958	2,417
3525	Housing (Duplex)	1958	2,206
3544	Housing (Duplex)	1958	2,206
3545	Housing (Duplex)	1958	2,206
3546	Housing (Duplex)	1958	2,368
234 = Number of Structures		Total Square Feet	464,788

**Table 4-2  
Consolidated Parcels IRP Sites  
SCOU ROD 1 No Further Action Sites (No Removal Actions) – ECC 3**

IRP site	Name	Location or Function	Parcel	Possible Contaminants of Concern
FT002	FTA-2	Fire Training Area 2	A	PAHs
SD201	SWMU 4.9	B325 OWS	A	solvents
SD202	SWMU 4.10	B325 OWS	A	TVPH, TEPH
SD203	SWMU 4.11	B325 OWS	A	TEPH
SD205	SWMU 4.13	B508 OWS	A	TEPH, metals
SS022	PCB-1,2,3	Building 1203	A	PCBs
SS046	UFL-4	Underground Fuel Leak 4	A	fuels
SS049	B23	Building 23 Maintenance	A	Solvents, TCE, Oils, Lubricants, hydraulic fluid
SS061	B84	Building 84 Photo Lab	A	fixer solution, silver
SS062	ST-T85	Structure T85 photo Lab	A	silver, developers, fixers
SS074	ST1201	Former Structure 1201	A	fuels, lubricants
SS075	B1205	Former Building 1205	A	fuels, oils, solvents, grease
SS076	ST1206	Former Structure 1206	A	fuels, oils, solvents, grease
SS077	B1207	Building 1207	A	fuels, oils
SS083	B1335	Building 1335 Electronics	A	fixer solution, solvents, oils
SS087	B1529	Building 1529 Wash Rack	A	solvents, waste oil, grease, fuels
SS092	B1562	Building 1562 AGE	A	waste oil, hydraulic fluid
SS093	ST1571	Structure 1571 Wash Rack	A	waste oil, grease, fuels, solvents, TCE, LBP, break fluid
SS108	HWS-4	Hazardous Waste Storage 4	A	JP-4, waste oil
SS109	B1204	Former Building 1204 Vehicle Fueling	A	fuels
SS111	B1319	Building 1319 Aircraft Parts Cleaning	A	MEK, solvents, paints
SS113	B1404	Building 1404 Trailer Maintenance	A	used oil, hydraulic fluid
SS114	B1405	Building 1405 Battery Shop	A	acid, oils, fuels, hydraulic fluid
SS118	STA-1	Stained Area No. 1	A	PAHs, metals
SS119	STA-2	Stained Area No. 2	A	PAHs, metals
SS120	STA-3	Stained Area No. 3	A	PAHs, metals
SS121	STA-4	Stained Area No. 4	A	PAHs, metals
SS122	STA-5	Stained Area No. 5	A	PAHs, metals
SS123	STA-6	Stained Area No. 6	A	PAHs, metals
SS124	STA-7	Stained Area No. 7	A	PAHs, metals
SS125	STA-8	Stained Area No. 8	A	PAHs, metals
SS126	STA-9	Stained Area No. 9	A	PAHs, metals
SS127	STA-10	Stained Area No. 10	A	PAHs, metals
SS128	STA-11	Stained Area No. 11	A	PAHs, metals
SS129	STA-12	Stained Area No. 12	A	PAHs, metals
SS130	STA-13	Stained Area No. 13	A	PAHs, metals
SS131	STA-14	Stained Area No. 14	A	PAHs, metals
SS132	STA-15	Stained Area No. 15	A	PAHs, metals
SS133	STA-16	Stained Area No. 16	A	PAHs, metals
SS134	STA-17	Stained Area No. 17	A	PAHs, metals
SS135	STA-18	Stained Area No. 18	A	PAHs, metals
SS136	STA-19	Stained Area No. 19	A	PAHs, metals
SS137	STA-20	Stained Area No. 20	A	PAHs, metals
SS138	STA-21	Stained Area No. 21	A	PAHs, metals

**Table 4-2  
Consolidated Parcels IRP Sites  
SCOU ROD 1 No Further Action Sites (No Removal Actions) – ECC 3**

IRP site	Name	Location or Function	Parcel	Possible Contaminants of Concern
SS139	STA-22	Stained Area No. 22	A	PAHs, metals
SS140	STA-23	Stained Area No. 23	A	PAHs, metals
SS141	STA-24	Stained Area No. 24	A	PAHs, metals
SS142	STA-25	Stained Area No. 25	A	PAHs, metals
SS143	STA-26	Stained Area No. 26	A	PAHs, metals
SS144	STA-27	Stained Area No. 27	A	PAHs, metals
SS145	STA-28	Stained Area No. 28	A	PAHs, metals
SS146	STA-29	Stained Area No. 29	A	PAHs, metals
SS147	STA-30	Stained Area No. 30	A	PAHs, metals
SS148	STA-31	Stained Area No. 31	A	PAHs, metals
SS149	STA-32	Stained Area No. 32	A	PAHs, metals
SS165	SA-B4	Storage Area B4	A	BTEX, metals
SS166	F-1	Former Aircraft Hanger 1	A	fuels, solvents
SS167	F-2	Former Aircraft Hanger 2	A	fuels, solvents
SS168	F-3	Former Aircraft Hanger 3	A	fuels, solvents
SS170	F-5	Former Aircraft Hanger 5	A	fuels, solvents
SS171	F-6	Former Aircraft Hanger 6	A	none specified
SS183	ETC-3	Possible EOD Range	A	none
SS187	ETC 7	PFFA Parking Area	A	diesel, JP-4
SS193	SWMU 4.1	Building 1524 Drum Storage Area	A	multiple hazardous wastes
SS194	SWMU 4.2	Recoverable JP-4 tanks	A	waste JP-4 aircraft fuel
SS204	SWMU 4.12	Building 340 OWS	A	waste oil
SS211	SWMU 4.19	Building 1324 OWS site	A	fuels
SS212	SWMU 4.20	Building 1509 OWS site	A	waste oil
SS217	SWMU 4.25	Building 84 Silver Recovery Unit	A	silver
SS218	SWMU 4.26	Building 1253 Solvent Distillation Unit	A	VOCs
SS219	SWMU 4.27	Building 1253 Spray Booth	A	VOCs, paints
SS220	SWMU 4.28	Detonation and Burn Facility	A	pyrotechnics
SS222	SWMU 4.30	Building 1253 - 90 day Hazardous Waste Accumulation point	A	TCE, PCE
SS223	SWMU 4.31	Building 1350 - 90 day Hazardous Waste Accumulation point	A	none
SS224	SWMU 4.32	Building 1532 - 90 day Hazardous Waste Accumulation point	A	none
SS225	SWMU 4.33	Building 1550 - 90 day Hazardous Waste Accumulation point	A	none
SS226	SWMU 4.34	Building 1319 - 90 day Hazardous Waste Accumulation point	A	solvents, metals
SS227	SWMU 4.35	Building 325 - 90 day Hazardous Waste Accumulation point	A	metals
SS228	SWMU 4.36	Building 1324 - 90 day Hazardous Waste Storage	A	solvents
SS229	SWMU 4.37	Industrial Waste Line	A	fuels, oils, solvents, greases
SS230	SWMU 4.38	Basin south of operations apron	A	TVPH, TEPH
ST044	IWL	Industrial Waste Line	A	fuels, solvent, oils
WP036	SS-1	Sanitary Sewer 1	A	fuels, solvents, oils
WP038	SS-3	Sanitary Sewer 3	A	fuels, solvents, oils
WP040	SS-5	Sanitary Sewer 5	A	fuels, solvents, oils

**Table 4-2  
Consolidated Parcels IRP Sites  
SCOU ROD 1 No Further Action Sites (No Removal Actions) – ECC 3**

IRP site	Name	Location or Function	Parcel	Possible Contaminants of Concern
	SS-9	Building 42	A	fuels, solvents, oils
SS050	B47	Building 47 Hanger	A	solvents, fuels, lubricants, thinners, paints
SS073	B1182	Building 1182 Hospital	E	fixer, pathological wastes
SS216	SWMU 4.24	Building 1182 Silver Recovery Unit.	E	silver
SS027	PCB-8	Building 360	F1	PCBs
SS163	SA-B2	Storage Area B2	F2	unknown
WP172	LG-1	Sewage Treatment Lagoon Near LF-1	F2	none
SS066	B541	Building 541	G2	asbestos
SS067	B545	Building 545 Demolished	G2	liquid fuels
SS068	B547	Building 547	G2	fuels, solvents, paints
SS186	ETC-6	Former Gas Station S706	G2	none identified
SS162	SA-B1	Storage Area B1	G3	unknown
DP100	DP-2	Disposal Pit 2 at LF-1	G4	none
SD045	SDS	Storm Drain System	All	dioxin, fuels, oils

**Notes**

The above IRP sites, located within the consolidated parcels, are recommended for NFA, with no proposed remedial action (SCOU RI/FS) and listed as NFA in the SCOU ROD 1 dated September 2002. No Removal Action or Remedial Action has occurred at these sites. There are no restrictions on future use.

**Table 4-3  
Consolidated Parcels IRP Sites  
SCOU ROD 2 No Further Action Sites Sites—ECC 2/ECC 4**

Site	IRP Number	Parcel	Removal/Remedial Action	Completion Date	Closure Report <sup>1</sup>	Report Date
<b>ECC 2 Sites</b>						
STA-33	SS150	A	None – Exempt	NA	NA	NA
STA-34	SS151	A	None – Exempt	NA	NA	NA
STA-35	SS152	A	None – Exempt	NA	NA	NA
STA-36	SS153	A	None – Exempt	NA	NA	NA
STA-37	SS154	A	None – Exempt	NA	NA	NA
STA-38	SS155	A	None – Exempt	NA	NA	NA
STA-39	SS156	A	None – Exempt	NA	NA	NA
STA-40	SS157	A	None – Exempt	NA	NA	NA
STA-41	SS158	A	None – Exempt	NA	NA	NA
STA-42	SS159	A	None – Exempt	NA	NA	NA
STA-43	SS160	A	None – Exempt	NA	NA	NA
STA-44	SS161	A	None – Exempt	NA	NA	NA
<b>ECC 4 Sites</b>						
B1541	SS089	A	E&D	September 2002	1	2002
SWMU 4.5	SD197	A	E&D	July 2002	2	2002
SWMU 4.7	SD199	A	E&D	2001	3	2002
SWMU 4.8	SD200	A	E&D	2001	3	2002
SWMU 4.15	SD207	A	E&D	1998	4	2002
SWMU 4.23	SD215	A	E&D	September 2002	1	2002
PCB-4	SS023	F3	E&D	2002	5	2002
PCB-5	SS024	G2	E&D	2002	5	2002
PCB-6	SS025	G3	Closure sampling	2002	5	2002

**Notes**

All removal/remedial actions have been completed and these sites are now closed. There is no restriction on future use.

<sup>1</sup> Closure reports for these sites are listed below:

1. Montgomery Watson Harza, Inc. 2002. *Closure Report, B1541 Hangar Area, Castle Airport, California.*
2. Parsons. 2002. *Closure Report for Building 79 and SWMU 4.5, Petroleum Oils, and Lubricants, Fuel Farm Area (PFFA) Associated Site, Castle Airport, California.*
3. Montgomery Watson Harza, Inc. 2002. *Closure Report for FTA-3, Building 551, SWMU 4.7, SWMU 4.8, and SWMU 4.14, Castle Airport, California.*
4. Jacobs Engineering Group. 2002. *Site Closure Summary for Building 929 (SWMU 4.15), Castle Airport, California.*
5. Jacobs Engineering Group. 2002. *Removal Action and Investigation Summary for PCB Sites 4, 5, and 6, Castle Airport, California.*

E&D	excavation and disposal	NFA	no further action
ECC	Environmental Condition Category	ROD	Record of Decision
IRP	Installation Restoration Program	SCOU	Source Control Operable Unit
NA	not applicable		

**Table 4-12  
Underground Storage Tank Inventory**

Facility or Building No.	Tank No.	Parcel	Status EBS Table 3-4 1993	Content	Capacity (gallons)	Removal Date or Status	Date of RWQCB Closure Letter	Years of Operation
54		A	ACT	Heating Fuel	2,000	3/14/1996	4-Nov-97	1944 - 1996
65	1	A	ACT	Diesel	4,000	4/11/1996	Pending Closure Report	1941 - 1996
65	2	A	REM	Waste Oil	5,000	4/25/1991	Pending Closure Report	NA - 1991
65	3	A	REM	Waste Oil	5,000	4/25/1991	Pending Closure Report	NA - 1991
65	4	A	ACT	Mogas	8,000	4/11/1996	Pending Closure Report	1949 - 1996
65	5	A	REM	Waste Oil	10,000	4/25/1991	Pending Closure Report	NA - 1991
65	8	A		Waste Oil	850	1999	Pending Closure Report	?? - 1999
74		A	ACT		500	2/17/1994	ACC	1968 - 1994
152		A	ACT	Diesel	550	2/29/1996	9-Jan-97	1952 - 1996
175		A	ACT	Heating Fuel	5,500	3/14/1996	4-Nov-97	1952 - 1996
325		A	ACT	Heating Fuel	2,000	3/14/1996	4-Nov-97	1956 - 1996
340		A	ACT	Waste Oil	350		Removal Planned	1988 - 1995
501	8	A	REM	JP-4	25,000	1991	ACC	1950 - 1991
501	9	A	REM	JP-4	25,000	1991	ACC	1950 - 1991
501	10	A	REM	JP-4	25,000	1991	ACC	1950 - 1991
501	11	A	REM	JP-4	25,000	1991	ACC	1950 - 1991
501	12	A	REM	JP-4	25,000	1991	ACC	1950 - 1991
501	13	A	REM	JP-4	25,000	1991	ACC	1950 - 1991
501	14	A	REM	JP-4	25,000	1991	ACC	1950 - 1991
501	15	A	REM	JP-4	25,000	1991	ACC	1950 - 1991
501	16	A	REM	JP-4	25,000	1991	ACC	1950 - 1991
501	17	A	REM	JP-4	25,000	1991	ACC	1950 - 1991
502	1	A	INA	Fuel Product	1,200	12/15/1993	16-Mar-98	NA - 1993
502	2	A	ACT	Mogas	12,000	6/13/1996	16-Mar-98	1942 - 1996
502	3	A	ACT	Mogas	12,000	6/13/1996	16-Mar-98	1942 - 1996
502	4	A	ACT	Diesel	12,000	6/13/1996	16-Mar-98	1942 - 1996
502	5	A	ACT	Diesel	12,000	6/13/1996	16-Mar-98	1942 - 1996
505	1	A	REM	JP-4	25,000	1991	ACC	1950 - 1991
505	2	A	REM	JP-4	25,000	1991	ACC	1950 - 1991
505	3	A	REM	JP-4	25,000	1991	ACC	1950 - 1991
505	4	A	REM	JP-4	25,000	1991	ACC	1950 - 1991
909		A	ACT	Water	4,000		Unregulated	1991 - 1995
950		A	REM	Waste Oil	200	1988	ACC	1956 - 1988
1203		A	REM	Diesel	1,000	?	ACC	-
1210		A	ACT	Heating Fuel	10,000	6/20/1996	27-Aug-01	1953 - 1996
1210		A	ACT	Heating Fuel	10,000	6/20/1996	27-Aug-01	1953 - 1996
1210		A	ACT	Heating Fuel	15,000	6/14/1996	27-Aug-01	1953 - 1996
1230		A	ACT	Heating Fuel	300	2/22/1996	4-Nov-97	1953 - 1996
1230		A	ACT	Heating Fuel	1,200	2/22/1996	4-Nov-97	1953 - 1996
1231		A	INA	Fuel	300	12/15/1993	30-Jul-97	NA - 1993
1253		A	ACT	Heating Fuel	12,000	6/21/1996	30-Jul-97	1978 - 1996
1260		A	ACT	Heating Fuel	3,000	3/7/1996	16-Mar-98	1955 - 1996

**Table 4-12  
Underground Storage Tank Inventory**

Facility or Building No.	Tank No.	Parcel	Status EBS Table 3-4 1993	Content	Capacity (gallons)	Removal Date or Status	Date of RWQCB Closure Letter	Years of Operation
1309		A	ACT	Heating Fuel	300	2/15/1996	9-Jan-97	1957 - 1996
1310		A	ACT	Heating Fuel	500	2/15/1996	4-Nov-97	1957 - 1996
1311		A		Water	50,000	6/20/1905	Unregulated	- 1998
1315		A	ACT	Heating Fuel	500	2/8/1996	16-Mar-98	1957 - 1996
1317		A	ACT	Anhydrous Ammonia	4000	2/25/1996	30-Jul-97	1969 - 1969
1319		A	ACT	Heating Fuel	5,500	3/14/1996	16-Mar-98	1969 - 1996
1320		A	ACT	Heating Fuel	550	2/8/1996	30-Jul-97	1955 - 1996
1321		A		Generator Fuel	120	4/15/1996	9-Jan-97	NA - 1996
1322		A	ACT	Heating Fuel	500	2/8/1996	30-Jul-97	1957 - 1996
1324		A		Waste Oil	700	4/26/1991	16-Mar-98	NA - 1991
1325	1	A	ACT	Heating Fuel	700	6/20/1996	30-Jul-97	1955 - 1996
1325	2	A	ACT	Mogas	5,000	6/27/1996	Pending SVE Biovent Completion	1968 - 1996
1325	3	A	ACT	JP-8	10,000	6/27/1996	Pending SVE Biovent Completion	1968 - 1996
1325	4	A	ACT	Diesel	10,000	6/27/1996	Pending SVE Biovent Completion	1968 - 1996
1325	5	A	INA	JP-4	10,000	6/27/1996	Pending Closure Report	1968 - NA
1330		A	REM	Heating Fuel	700	6/12/1905	6-Jul-01	?? - 1990
1332		A		Hydraulic Fluid	600	4/18/1996	30-Jul-97	NA - 1996
1332		A	ACT	Heating Fuel	4,000	4/18/1996	30-Jul-97	1978 - 1996
1333		A	ACT	Heating Fuel	860	2/9/1996	9-Jan-97	1956 - 1996
1335	1	A	ACT	Heating Fuel	2,000	4/18/1996	4-Nov-97	1955 - 1996
1335	2	A		Heating Fuel	550		6-Jul-01	-
1336		A	CIP	JP-8	4,000	Wavier investigation Planned	RETAINED FOR LRA	1990 - 1995
1337	1	A	CIP	JP-4	2,000	Filled 1991	ACC	1952 - 1991
1337	2	A	CIP	JP-4	50,000	Filled 1991	ACC	1952 - 1991
1337	3	A	CIP	JP-4	50,000	Filled 1991	ACC	1952 - 1991
1337	4	A	CIP	JP-4	50,000	Filled 1991	ACC	1952 - 1991
1337	5	A	CIP	JP-4	50,000	Filled 1991	ACC	1952 - 1991
1337	6	A	CIP	JP-4	50,000	Filled 1991	ACC	1952 - 1991
1337	7	A	CIP	JP-4	50,000	Filled 1991	ACC	1952 - 1991
1340	1	A	ACT	Diesel	1,000	Filled 1996	30-Jul-97	1953 - 1991
1340	2	A	ACT	Heating Fuel	2,000	Filled 1996	30-Jul-97	1953 - 1991
1344		A	ACT	Heating Fuel	2,000	5/16/1996	30-Jul-97	1955 - 1996
1345		A	ACT	Diesel	500	4/18/1996	Pending JEG closure borings	1953 - 1993
1348	1	A	CIP	JP-4	50,000	Filled 1991	ACC	1952 - 1991
1348	2	A	CIP	JP-4	50,000	Filled 1991	ACC	1952 - 1991
1348	3	A	CIP	JP-4	50,000	Filled 1991	ACC	1952 - 1991
1348	4	A	CIP	JP-4	50,000	Filled 1991	ACC	1952 - 1991
1348	5	A	CIP	JP-4	50,000	Filled 1991	ACC	1952 - 1991
1348	6	A	CIP	JP-4	50,000	Filled 1991	ACC	1952 - 1991
1348	7	A	CIP	JP-4	2,000	Filled 1991	ACC	1952 - 1991
1350		A	ACT	Heating Fuel	25,000	8/1/1996	30-Jul-97	1954 - 1996

**Table 4-12  
 Underground Storage Tank Inventory**

Facility or Building No.	Tank No.	Parcel	Status EBS Table 3-4 1993	Content	Capacity (gallons)	Removal Date or Status	Date of RWQCB Closure Letter	Years of Operation
1350		A	ACT	Heating Fuel	25,000	8/1/1996	30-Jul-97	1954 - 1996
1360		A	ACT	Heating Fuel	2,000	3/7/1996	9-Jan-97	2000 - 1996
1401	1	A	CIP	JP-4	2,000	Filled 1991	ACC	1950 - 1991
1401	2	A	CIP	JP-4	20,000	Filled 1991	ACC	1952 - 1991
1401	3	A	CIP	JP-4	25,000	Filled 1991	ACC	1952 - 1991
1401	4	A	CIP	JP-4	25,000	Filled 1991	ACC	1952 - 1991
1401	5	A	CIP	JP-4	25,000	Filled 1991	ACC	1952 - 1991
1401	6	A	CIP	JP-4	25,000	Filled 1991	ACC	1952 - 1991
1401	7	A	CIP	JP-4	25,000	Filled 1991	ACC	1952 - 1991
1401	8	A	CIP	JP-4	25,000	Filled 1991	ACC	1952 - 1991
1401	9	A	CIP	JP-4	25,000	Filled 1991	ACC	1952 - 1991
1401	10	A	CIP	JP-4	25,000	Filled 1991	ACC	1952 - 1991
1401	11	A	CIP	JP-4	25,000	Filled 1991	ACC	1952 - 1991
1402	1	A	REM	JP-4	2,000	1991	ACC	1952 - 1991
1402	2	A	REM	JP-4	50,000	1991	ACC	1952 - 1991
1402	3	A	REM	JP-4	50,000	1991	ACC	1952 - 1991
1402	4	A	REM	JP-4	50,000	1991	ACC	1952 - 1991
1402	5	A	REM	JP-4	50,000	1991	ACC	1952 - 1991
1402	6	A	REM	JP-4	50,000	1991	ACC	1952 - 1991
1403	1	A	REM	JP-4	2,000	1991	ACC	1952 - 1991
1403	2	A	REM	JP-4	20,000	1991	ACC	1952 - 1991
1403	3	A	REM	JP-4	25,000	1991	ACC	1952 - 1991
1403	4	A	REM	JP-4	25,000	1991	ACC	1952 - 1991
1403	5	A	REM	JP-4	25,000	1991	ACC	1952 - 1991
1403	6	A	REM	JP-4	25,000	1991	ACC	1952 - 1991
1403	7	A	REM	JP-4	25,000	1991	ACC	1952 - 1991
1403	8	A	REM	JP-4	25,000	1991	ACC	1952 - 1991
1403	9	A	REM	JP-4	25,000	1991	ACC	1952 - 1991
1403	10	A	REM	JP-4	25,000	1991	ACC	1952 - 1991
1403	11	A	REM	JP-4	25,000	1991	ACC	1952 - 1991
1404		A	ACT	Heating Fuel	800	2/15/1996	4-Nov-97	1969 - 1996
1405		A	ACT	Heating Fuel	500	2/15/1996	4-Nov-97	1969 - 1996
1509		A	ACT	Heating Fuel	5,000	4/25/1996	Pending Closure Report	1984 - 1996
1532		A	ACT	Heating Fuel	1,000	3/7/1996	30-Jul-97	1961 - 1996
1550	1	A	ACT	Heating Fuel	5,500	3/7/1996	4-Nov-97	1956 - 1996
1550	2	A		Heating Fuel	10,000	Being investigated May not exist	Pending County Letter	-
1552		A		Waste Oil	5,200	4/25/1991	30-Jul-97	NA - 1991
1560		A	INA	Diesel	550	1/21/1994	23-Dec-02	NA - 1994
1567		A	REM	mogas	5,243	1991	ACC	1959 - 1991
1582		A	ACT	Heating Fuel	1,500	3/7/1996	9-Jan-97	1960 - 1996
1905		A	ACT	Diesel	300	3/21/1996	9-Jan-97	1964 - 1996
1182		E	ACT	Heating Fuel	10,000	7/11/1996	30-Jul-97	1964 - 1996
1182		E	ACT	Heating Fuel	20,000	7/25/1996	30-Jul-97	1964 - 1996
360	1	F1	ACT	Heating Fuel	10,000	5/30/1996	16-Mar-98	1958 - 1996

**Table 4-12  
 Underground Storage Tank Inventory**

Facility or Building No.	Tank No.	Parcel	Status EBS Table 3-4 1993	Content	Capacity (gallons)	Removal Date or Status	Date of RWQCB Closure Letter	Years of Operation
360	2	F1	ACT	Heating Fuel	20,000	7/25/1996	16-Mar-98	1958 - 1996
395		F1	ACT	Heating Fuel	1,000	3/14/1996	4-Nov-97	1957 - 1996
871		F2	ACT	Heating Fuel	8,000	5/16/1996	16-Mar-98	1981 - 1996
443		G1DK	ACT	Heating Fuel	12,000	8/1/1996	30-Jul-97	1941 - 1996
1015		G1DK	ACT	Heating Fuel	1,000	2/29/1996	9-Jan-97	1974 - 1996
1038		G1DK	ACT	Heating Fuel	2,000	2/29/1996	4-Nov-97	1982 - 1996
752		G2	ACT	Heating Fuel	8,000	5/23/1996	16-Mar-98	1959 - 1996
759	1	G2	ACT	Heating Fuel	4,000	2/29/1996	9-Jan-97	1959 - 1996
785		G2		Waste Oil	600	4/26/1991	30-Jul-97	NA - 1991
785		G2	ACT	Mogas	10,000	5/23/1996	Pending SVE or Biovent Completion	1955 - 1996
785		G2	ACT	Mogas	10,000	5/30/1996	Pending SVE or Biovent Completion	1955 - 1996
785		G2	ACT	Mogas	10,000	5/30/1996	Pending SVE or Biovent Completion	1955 - 1996
786		G2	ACT	Heating Fuel	400	2/22/1996	9-Jan-97	1956 - 1996
789		G2	ACT	Heating Fuel	500	2/22/1996	23-Dec-02	1970 - 1996

**Notes**

ACC UST Closed by Air Combat Command  
 RWQCB Regional Water Quality Control Board

EBS status:

ACT active  
 REM removed  
 INA inactive  
 CIP closed in place  
 not in EBS in 1993

**Table 4-13  
Aboveground Storage Tank Inventory**

Facility or Building No.	Location	Parcel	Contents	Capacity (gallons)	Status EBS Table 3-3 1993	Years of Operation	Program Status
41	Security Police	A	Diesel	275	Active	1942-1995	Removed
54	Mobility Center	A	Diesel	9	Active	1944-1995	Removed
65	Military Gas Station	A	Diesel	9	Active	Unknown-1995	Removed
71	POL yard	A	Diesel	sump 200	Active	1952-1995	Pickled
72	POL yard	A	JP-8	400,000	Active	1957-1995	Pickled
73	POL yard	A	JP-8	500,000	Active	1955-1995	Pickled
76	POL yard	A	JP-8	651,000	Active	1955-1995	Pickled
83	POL yard	A	JP-8	651,000	Active	1957-1995	Pickled
505	POL yard	A	MOGAS	12,000	Active	1955-1995	In Use
508	POL yard	A	Diesel	9	Active	1976-pre 1995	Removed
929	Sewage treatment plant	A	Waste oil	1,000	Active	1991-1995	Removed
950	Old Jet Engine Test Cell	A	JP-4	2,500	Active	Unknown-1995	Removed
952	Test Cell	A	JP-4	2,500	Active	1971-1995	Removed
956	Old Test Cell	A	JP-4	2,500	Active	1987-1995	Inactive
956	Test Cell	A	Demineralized water	250	Active	Unknown-1995	Inactive
1200	CE Complex	A	Diesel	900	Active	Unknown-1995	Inactive
1231	Wing HQ	A	Diesel	275	Active	Unknown-present	Inactive
1313	Hazardous Waste Accumulation Point	A	Waste oil	5,000	Active	1982-1995	Inactive
1313	Hazardous Waste Accumulation Point	A	Waste oil	5,000	Active	1982-1995	Inactive
1313	Hazardous Waste Accumulation Point	A	JP-4	5,000	Active	1982-1994	Removed
1313	Hazardous Waste Accumulation Point	A	JP-8	4,500	Active	1982-1995	Inactive
1313	Hazardous Waste Accumulation Point	A	JP-8	4,500	Active	1982-1995	Inactive
1313	Hazardous Waste Accumulation Point	A	JP-4	5,000	Active	1982-1994	Removed
1316	Cryogenics	A	Liquid oxygen	5,000	Active	1962-pre-1995	Removed
1316	Cryogenics	A	Liquid oxygen	5,000	Active	1962-pre-1995	Removed
1316	Cryogenics	A	Liquid nitrogen	2,000	Active	1962-pre-1995	Removed
1316	Cryogenics	A	Liquid nitrogen	400	Active	1962-pre-1995	Removed
1319	GAM	A	Diesel	9	Active	1984-1995	Removed
1325	AGE	A	Diesel	20	Active	Unknown-1995	Removed
1330	Communications	A	Diesel	9	Active	1985-1995	Removed
1336	Hydrant facility	A	Diesel	275	Active	1991-1995	Removed
1344	Fire Station	A	Diesel	275	Active	1955-present	Active
1345	Airfield lighting vault	A	Diesel	275	Active	Unknown-2003	Removed
1346	Flightline area	A	Water	750,000	Active	1954-present	Active
1347	Deluge System	A	Diesel	320	Active	1954-present	Active
1347	Deluge System	A	Diesel	320	Active	1954-present	Active

**Table 4-13  
 Aboveground Storage Tank Inventory**

Facility or Building No.	Location	Parcel	Contents	Capacity (gallons)	Status EBS Table 3-3 1993	Years of Operation	Program Status
1347	Deluge System	A	Diesel	320	Active	1954-present	Active
1347	Deluge System	A	Diesel	320	Active	1954-present	Active
1348		A	Diesel	2000			Removed
1360		A	Diesel	9			Removed
1509	Aircraft hangar	A	Flame retardant	Unknown	Not listed	Unknown-2003	Removed
1521		A	Aircraft soap	8,000	Active	1955-present	Removed
1521		A	Waste oil	10,000	Active	1955-1995	Removed
1522	Aircraft wash rack OWS	A	Waste oil	2,000		Unknown-1995	Removed
1523	Wash rack OWS	A	Waste oil	4,000	Unknown	1991-1995	Removed
1530	Wash rack area	A	Aircraft soap	10,000	Active	1987-present	Inactive
1530	Wash rack area	A	Unknown	2,000	Inactive	1987-1995	Removed
1532	Wash rack Area	A	Aircraft soap	10,000	Inactive	1987-1993	Removed
1535	Simulator Bldg.	A	Diesel	9	Active	1982-1995	Removed
1550	Munitions maintenance	A	Diesel	9	Active	1988-1995	Removed
1560		A	Diesel	107	Active	1974-	Removed
1576		A	Diesel	60	Active		Removed
1582		A	Diesel	275	Active		Removed
1584	Water well	A	Diesel	500	Active	1990-present	Active
1585		A	Diesel	500	Active	1972-	Removed
1701	South Runway	A	Diesel	14	Removed	1980-1995	Removed
1707	West perimeter Rd	A	Diesel	9	Active	1954-present	Removed
1906	Comm.	A	Diesel	14	Cannot Locate	1982-present	Removed
1907	Comm.	A	Diesel	14	Removed	1956-1995	Removed
4112	JP-7	A	JP-7	420,000	Inactive	1964-present	Non Fuels ReUse
4114	JP-7	A	JP-7	420,000	Inactive	1964-present	Non Fuels ReUse
4130	Hydrant Fueling Facility	A	JP-4	600,000	Active	1991-1995	Pickled. Now in Reuse
4141	Hydrant Fueling Facility	A	JP-4	600,000	Active	1991-1995	Pickled
360	FMO Heat Plant	F1	Diesel	275	Removed	1984-unknown	Removed
362	Dining Hall	F1	Diesel	20		Unknown-1995	Removed
545	Security Police	G2	Diesel	55	Active	Unknown-1995	Removed
704	Water tower support	G2	Diesel	9	Active	1983-1995	Removed
752	Post Office	G2	Diesel	9	Removed	1959-1995	Removed
765	Commissary	G2	Diesel	9	Active	1990-1997	Removed
785	BX service station	G2	Waste oil	500	Active	Unknown-1995	Removed
851	Grounds Contractor Yard	G3	MOGAS	500	Active	Unknown-1995	Removed
851	Grounds Contractor Yard	G3	Diesel	500	Active	Unknown-1995	Removed

**Table 5-1  
Adjacent Parcel Facility Property Matrix**

(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
1718 (Training Aid)	B1	D-2		NA							U			7	4
1725 (Water Well)	B1	D-2	1956	NA							U			7	4
1728 (Generator)	B1	D-2	1956	NA				UST-I (7)	Diesel	5,000	Y	X	Physical	7	4
1880 (Transmitter)	B1	D-2	1954	1,826	SS-26			AST-A (2)	Diesel	14	U	X	Physical	7	4
								UST-I (7)	Diesel	1,000					
1881 (Water Well)	B1	D-2	1954	64				AST-U (2)	Diesel	1,000	U	X	Physical	7	4
1882 (Firing Range)	B1	D-2	1961	NA		H(2)					U		Physical	7	4
1884 (Storage)	B1	D-2	1944	424							U	X	Physical	7	4
1885 (Machine Gun Range)	B1	D-2	1985	NA							U		Physical	7	4
1887 (Office)	B1	D-3	1964	1,536		H(2)		UST-A (7)	Diesel	1,000	U	X	Physical	6	4
1891 (Demolition and Burn Facility)	B1	D-1	1961	NA							U		Physical	6	4
1900 (Communications Receiver)	B1	B-5	1954	1,023				AST-A (2)	Diesel	14	U	X	Physical	7	4
								AST-A (2)	Diesel	350					
1901(Navigational Aid)	B1	B-5		NA							U			7	4
7551 (Skeet Range)	B1	D-2	1968	NA							U	X	Physical	7	4
1709 (Shop)	B2	B-2	1956	9,554		H(7)	W(7)	UST-A (7)	Heating Oil	2,000	Y	X	Physical	7	5
1715 (Office)	B2	D-2	1956	1,287				UST-A (7)	Heating Oil	800	U	X	Physical	7	4
								AST-A (2)	Unknown	500					
1716 (Industrial)	B2	Unknown	1965	50							U	X			4
1720 (Water Well)	B2	D-2	1956	112							U		Physical	7	4
1723 (Water Tank)	B2	D-2	1956	NA							U	X		7	4
1740 (Storage)	B2	D-2	1953	8,000							U		Physical	7	4
1750 (Generator)	B2	D-2	1981	NA				UST-A (7)	Diesel	4,000	U		Physical	7	4
1760 (Shop)	B2	D-2	1981	1,614							U			7	4
1761 (septic tank)	B2	D-2									N		Physical	7	4
1762 (Industrial)	B2	D-2	1959	4,043	ST-34		W(7)	UST-I (7)	Heating Oil	800	Y	X	Physical	7	5
1764 (Munition Cubicle)	B2	D-2	1959	5,644							U	X	Physical	7	4

**Table 5-1  
Adjacent Parcel Facility Property Matrix**

(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
1765 (Munition Cubicle)	B2	D-2	1959	5,644							U	X	Visual	7	4
1766 (Munition Cubicle)	B2	D-2	1959	5,644							U	X	Visual	7	4
1767 (Munition Cubicle)	B2	D-2	5,644								U	X	Visual	7	4
1801 (Storage Igloo)	B2	B-5	1953	1,608							U	X	Visual	7	4
1802 (Storage Igloo)	B2	B-5	1953	1,608							U	X	Visual	7	4
1803 (Storage Igloo)	B2	B-5	1953	1,608							U	X	Visual	7	4
1804 (Storage Igloo)	B2	B-5	1953	1,608							U	X	Visual	7	4
1805 (Storage Igloo)	B2	B-5	1953	1,608							U	X	Visual	7	4
1806 (Storage Igloo)	B2	D-2	1953	1,608							U	X	Visual	7	4
1807 (Storage Igloo)	B2	D-2	1953	1,608							U	X	Visual	7	4
1808 (Storage Igloo)	B2	D-2	1953	1,608							U	X	Visual	7	4
1809 (Storage Igloo)	B2	D-2	1953	1,608							U	X	Visual	7	4
1810 (Storage Igloo)	B2	B-5	1953	1,608							U	X	Visual	7	4
1811 (Storage Igloo)	B2	B-5	1953	1,608							U	X	Visual	7	4
1812 (Storage Igloo)	B2	B-5	1953	1,608							U	X	Visual	7	4
1813 (Storage Igloo)	B2	B-5	1953	1,608							U	X	Visual	7	4
1814 (Storage Igloo)	B2	B-5	1953	1,608							U	X	Visual	7	4
1815 (Storage Igloo)	B2	D-2	1953	1,608							U	X	Visual	7	4
1816 (Storage Igloo)	B2	D-2	1953	1,608							U	X	Visual	7	4
1817 (Storage Igloo)	B2	D-2	1953	1,608							U	X	Visual	7	4
1818 (Storage Magazine)	B2	D-2	1953	433							U	X	Physical	7	4
1819 (Storage Igloo)	B2	B-5	1953	1,608							U	X	Visual	7	4
1820 (Storage Igloo)	B2	B-5	1953	1,608							U	X	Visual	7	4
1821 (Storage Igloo)	B2	B-5	1953	1,608							U	X	Visual	7	4
1822 (Storage Igloo)	B2	B-5	1953	1,608							U	X	Visual	7	4
1823 (Storage Igloo)	B2	D-2	1953	1,608							U	X	Visual	7	4
1824 (Storage Igloo)	B2	D-2	1953	1,608							U	X	Visual	7	4
1825 (Storage Igloo)	B2	D-2	1953	1,608							U	X	Visual	7	4
1826 (Storage Igloo)	B2	D-2	1956	1,433							U	X	Physical	7	4
1830 (Storage Igloo)	B2	D-2	1956	1,433							U	X	Physical	7	4

**Table 5-1  
Adjacent Parcel Facility Property Matrix**

(Facilities in shaded rows have been demolished or removed)

Facility (Use)	Parcel	Property ID Number	Year of Construction	Square Footage	IRP Site	Hazardous Materials	Hazardous Waste	Storage Tanks/OWSs			ACM	Lead-Based Paint	Type of Inspection Completed	Overall Property Category (1993)	Overall Property Category (2003)
								Type	Content	Capacity (gallons)					
1862 (Storage)	B2	D-2	1953	8,000							U	X	Physical	7	4
1863 (Storage)	B2	D-2	1953	8,000							U	X	Physical	7	4
1865 (Guard Tower)	B2										U			7	2
1710 (Shed)	B4	D-2	1954	104							U	X		7	1
1711 (Kennel)	B4	D-2	1990	996		H(2)					U			7	1
1712 (Storage)	B4	D-2	1956	567		H(2)					U	X		7	1
1713 (septic tank)	B4	D-2									N		Physical	7	1
1888 (Radar Tower)	B5	D-3	1981	240	FT-01						U			6	5
1833 (Loading Platform)		Unknown (unable to locate)	1982	900							U			7	
9204 (Industrial)		Unknown (unable to locate)	1960	100							U	X			

**Notes**

Parcel column added for location of facilities.

- A active
- ACM asbestos-containing material
- AST aboveground storage tank
- ECC Environmental Condition Category
- H facility usage included storage of hazardous materials
- I inactive or closed in place
- M medical/biohazardous waste generated within the facility
- MOGAS motor gasoline
- N no suspected acm identified, or facility type excludes use of acm
- NA not applicable

- OWS oil/water separator
- P facility use included storage of pesticides.
- POL petroleum, oils, and lubricants
- R removed
- U unknown status
- UST underground storage tank
- W facility where hazardous wastes were generated or stored.
- X facility was constructed prior to or during 1978.
- Y yes

*ECC Property Categories (1993)*

- 6 Required remedial actions have not been taken
- 7 Site requires evaluation

*ECC Property Categories (2003)*

- 1 No release or disposal of hazardous substances/petroleum products
- 4 Remedial actions have been completed
- 5 Remedial actions are in progress

**Appendix A**  
**Regulatory Comments**



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 Supplemental to the Basewide Environmental Baseline Survey (SBEBS), Consolidated Parcels A, C1, C2a, C2b, E, 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) Report Organization: While the draft report contains all the general sections of a typical EBS report, it is difficult to form a comprehensive understanding of all the environmental conditions on the subject parcels after reading the report. Please revise the report and discuss what environmental conditions have been updated in this report and what had already been included on the original report. Since this report will become an addendum to the 1993 EBS for Castle Air Force Base, sections with information which has not changed since the 1993 EBS report can simply note as “No Change” and reference the original report for site conditions. Only the updated information needs to be emphasized in this report.
- 2) Comprehensive Figure and Table: Please provide a comprehensive map or figure that can clearly illustrate all of the current environmental conditions on the subject parcels. In addition, please develop a comprehensive table with all the IRP and petroleum sites and their current remediation status. The table should also include any RCRA facility within the subject parcels in the report. In addition, the sites and facilities should be included in the comprehensive map/figure.

**Specific Comments:**

- 1) Section 4.2, Hazardous Substances and Petroleum Products: The first sentence in this section indicates that there are 206 IRP sites within the Consolidated Parcels. However, Section 4.2.3 states that there are a total of 201 IRP sites (two groundwater plumes and 199 soil IRP sites). Please resolve the discrepancy.
- 2) Section 4.2, Various Tables: Please provide a single table with all the IRP sites discussed in

the report. For example, the draft report presents the IRP sites on Parcel A alone in eight tables which makes it very difficult to track.

- 3) Section 4.2.1.A & B, Hazardous Material Storage and Potential Releases of Hazardous Materials: The section indicates that the current lessee of Parcel A, Merced County, not only stores hazardous materials on Parcel A, but has caused potential releases of hazardous materials on the property. 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.
- 4) Section 4.3, IRP Sites by Parcel:
  - a. Although the 12 listed IRP sites in Table 4-1 are exempt from CERCLA, please identify any non-CERCLA action for these sites, if any, under the Remedial Action column. “Exempt from CERCLA” is not a remedial action under any program. The SBEBS should address all environmental conditions regardless of whether the site is a.
  - b. Please clarify that this section discusses soil IRP sites as the two groundwater IRP sites are discussed in the previous section.
  - c. Please clarify the difference between a removal action and a corrective action as the two phrases seem to be used for different remedial actions.
- 1) Section 4.3.4, Parcel C2b IRP Sites: The definition of Parcel C2b and its appropriate Environmental Condition Category (ECC) ranking have not been clearly defined in the report. The figures in the report indicates the site is around the footprint of Building (B) 51, with an ECC ranking of 5, but numerous references in the text state different ECC rankings and building references for the site (e.g., Table 1-1 lists Parcel C2b as Building 1, Castle Air Museum Storage, Table 4-9 includes the B51/B54 Group with an ECC of 5, and Table 4-4 lists Parcel C2b as Building 47 with an ECC ranking of 3). Please revise the report to clearly state the ECC ranking and the boundaries of Parcel C2b.

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](mailto:tan.lida@epa.gov).

Sincerely,

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

cc:

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4500 North Hosital Road  
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SUPPLEMENT TO THE BASEWIDE ENVIRONMENTAL BASELINE SURVEY,  
(SEBS) CONSOLIDATED PARCELS A, C1, C2a, C2b,E, F1, F2, F3, G1DK, G2, G3,  
G4, G5, G6, H2, I, J1b and L

Dear Mr. Hawley,

Thank you for the opportunity to review the above referenced document. Based on our review, we have the following comments to provide:

- 1) Section 1, Executive Summary. As this section states, several of the parcels included in the SEBS were originally classified as ECC 7. However, based on the information presented, it is difficult for the reader to follow the progression and rationale for the revised ECC classifications. Therefore, please include a detailed discussion, parcel by parcel, which summarizes the progression of removal or remedial actions taken to date in support of the current proposed ECC's.
- 2) Section 1, Executive Summary, page 1-4. Please reference the date of the final signed OPS document.
- 3) Section 2.2, Boundaries of Parcel and Scope of Survey, page 2-1. In the second paragraph, please indicate in the SEBS documents that the environmental findings of the above parcels support justification for property transfer.
- 4) Section 2.3, Site History and Current Use. Please indicate that legal property descriptions will be provided in the real estate transfer documents.
- 5) Section 3.3, Inspections of Property Conducted. Prior to transfer, interior inspections must be conducted on all buildings to be transferred in order to document their current environmental condition. DTSC understands that site inspections were conducted indoor and outdoor of the buildings referenced in the document, but since that time the buildings have been leased. Therefore in order to determine that no spills of hazardous substances or deterioration of Asbestos Containing Material (ACM) has occurred, the buildings must be inspected prior to concurrence of the FOST.
- 6) Section 4.2.1, Hazardous Materials Management, page 4-2. Please include a brief narrative of the current status of the removal action for IRP site B871.

- 7) Section 4.2.1, Hazardous Materials Management, page 4-3. The text references “(A) Hazardous Materials Storage” and “(B) Potential Releases of Hazardous Materials” which were identified during a VSI conducted May through July 2003. While the referenced hazardous materials and potential hazardous material releases may have occurred while leased to the County, it is ultimately the Air Force’s responsibility to ensure these potential environmental issues are addressed prior to transfer. DTSC will not concur that any of the buildings or parcels listed in this section are suitable to transfer until it has been documented that all hazardous material storage and/or spills have been adequately addressed. Please verify the current status of each building listed in Sections (A) and (B) accordingly.
- 8) Section 4.2.1.3, ECC 4 Sites, Table 4-7. The Air Force needs to better define the current remedial action status of the sites listed in this table. Of the 9 site listed, only Hangar F-4 has an approved closure report. Therefore, unless it can be documented and approved by the BCT that each site meets the definition of ECC 4, some of these sites may not be suitable for transfer at this time.
- 9) Section 4.2.3, Installation Restoration Program (IRP). This section describes the status of the 199 IRP sites located within the scope of the SEBS, 113 of which are currently designated as NFA (No Further Action) status. It is unclear, however, if the NFA sites are suitable for unrestricted use. Therefore, please include a table which details how NFA was reached for each site. The table should, at a minimum, include the designated site number, the removal or remedial action completed, the date of such completion, and if the site has been cleaned up to unrestricted use. The table should also reference the title and date of the environmental document relevant to each site which would support the conclusion of suitable for unrestricted use.
- 10) Section 4.3.1.1. ECC 2 Sites. 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.
- 11) Section 4.6, Pesticide Usage. The text states pesticides and herbicides were stored in buildings B907, B908, and B917 within Parcel A. Did the investigation of these buildings during the SCOU RI/FS include soil sampling around pesticide mixing areas? Please provide more narrative information regarding this topic in this section. It is unclear to the reader if only a visual inspection was conducted, or if soil sampling was also part of the investigation.
- 12) Section 4.7, Polychlorinated Biphenyls (PCBs). A review of this section indicates that at present the areas between B59 and B79, and B1348 are not suitable to

- transfer. Again, the purpose of the SEBS is to provide technical information which supports the recommendations in the FOST. DTSC understands that the inappropriate storage and release of PCBs resulted from action taken by the County of Merced or its tenants. However, if these releases are not addressed by the Air Force, or by oversight by the Air Force, these sites could become new IRP sites and therefore not suitable to transfer.
- 13) Section 4.10, Asbestos. This section states “most potential ACM was intact and in good condition”. However, it also lists several areas within buildings where damaged or potentially friable ACM exists. In addition, a thorough inspection of all buildings relevant to this SEBS has not been completed to date. Please address the issue of abatement of all areas within buildings which contain damaged or friable ACM. Also, until an inspection has been completed for all buildings proposed for transfer, DTSC will not concur that the buildings are suitable for transfer at this time.
  - 14) Section 4.11, Lead-Based Paint (LBP), The text does not address the potential for lead in soil. The bulleted items listed on page 4-40 describe the presence of chipping and/or peeling paint on the exterior of buildings. DTSC has determined lead in soil is a CERCLA hazardous substances release. Therefore, since the parcels contained in the SEBS have not been sampled for lead in soil, and a potential for contamination exists, the parcels are not suitable for transfer for unrestricted or sensitive use until it can be confirmed that no risk from lead in soil exists for future users. Therefore, please conduct representative sampling to determine if lead in soil is present. DTSC will work with the Air Force on the sampling strategy.
  - 15) Figures. Please include a map which clearly illustrates which parcels are proposed for transfer and which parcels have been carved out from the property proposed for transfer which is supported by this SEBS.
  - 16) Please note that these comments have been written by DTSC and do not include any comments which the RWQCB may have concerning the contents of the SEBS. Comments from the RWQCB will come under separate cover and from their office.

If you have any questions concerning these comments, please direct them to me via letter or phone (916) 255-3603.

Sincerely,

Francesca D’Onofrio  
Hazardous Substances Scientist  
Office of Military Facilities

**Appendix B**  
**Response to Regulatory Comments**

**Response to EPA Comments  
on the Supplement to the Basewide Environmental Baseline Survey  
Consolidated Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3,  
G4, G5, G6, H2, I, J1b and L**

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

**General Comments**

1. Report Organization: While the draft report contains all the general sections of a typical EBS report, it is difficult to form a comprehensive understanding of all the environmental conditions on the subject parcels after reading the report. Please revise the report and discuss what environmental conditions have been updated in this report and what had already been included on the original report. Since this report will become an addendum to the 1993 EBS for Castle Air Force Base, sections with information which has not changed since the 1993 EBS report can simply note as "No Change" and reference the original report for site conditions. Only the updated information needs to be emphasized in this report.

**The only sections that have not changed since the 1993 BEBS are: 4.8/Radon, 4.16/Natural Environments, 5.3/OWSs in Adjacent Parcels and 5.4/Pesticides Usage in Adjacent Parcels. The phrase "(No Changes)" will be added to the section headings, where applicable, for clarification. To facilitate document review, the subsections with significant revisions will be identified at the beginning of each section as follows: "The following subsections have been updated significantly since the 1993 BEBS: \_\_\_\_\_."**

2. Comprehensive Figure and Table: Please provide a comprehensive map or figure that can clearly illustrate all of the current environmental conditions on the subject parcels. In addition, please develop a comprehensive table with all the IRP and petroleum sites and their current remediation status. The table should also include any RCRA facility within the subject parcels in the report. In addition, the sites and facilities should be included in the comprehensive map/figure.

**Plate 1 from the SCOU ROD 3 has been modified to show Castle parcel boundaries/identification and inserted into the SBEBs. All IRP/PHO sites and the TCE groundwater plumes are already shown. The plate will include a comprehensive table of IRP/PHO sites by parcel.**

### Specific Comments

1. Section 4.2, Hazardous Substances and Petroleum Products: The first sentence in this section indicates that there are 206 IRP sites within the Consolidated Parcels. However, Section 4.2.3 states that there are a total of 201 IRP sites (two groundwater plumes and 199 soil IRP sites). Please resolve the discrepancy.

**There are actually 196 IRP soil sites (SCOU) within the Consolidated Parcels. Both references will be corrected.**

2. Section 4.2, Various Tables: Please provide a single table with all the IRP sites discussed in the report. For example, the draft report presents the IRP sites on Parcel A alone in eight tables which makes it very difficult to track.

**All of the IRP/PHO sites in Parcel A will be consolidated in a single table.**

3. Section 4.2.1.A & B, Hazardous Material Storage and Potential Releases of Hazardous Materials: The section indicates that the current lessee of Parcel A, Merced County, not only stores hazardous materials on Parcel A, but has caused potential releases of hazardous materials on the property. 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 VSIs were updated in November 2003 and confirmation inspections were conducted in March 2004 to determine the status of hazardous materials storage/release issues in the SBEBS. Merced County has taken actions to remove transformers/switches/drums and has issued citations to former tenants for hazardous materials storage violations, and 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 updated in the SBEBS.**

4. Section 4.3, IRP Sites by Parcel:
  - a. Although the 12 listed IRP sites in Table 4-1 are exempt from CERCLA, please identify any non-CERCLA action for these sites, if any, under the Remedial Action column. "Exempt from CERCLA" is not a remedial action under any program. The SBEBS should address all environmental conditions regardless of whether the site is a.

**No CERCLA removal or remedial actions were performed at the 12 exempt stain sites. These sites have been approved for NFA status by the regulatory agencies. “None- CERCLA; NFA” will be listed for these stain sites under Remedial Action in Table 4-1.**

- b. Please clarify that this section discusses soil IRP sites as the two groundwater IRP sites are discussed in the previous section.

**The text will be revised as requested.**

- c. Please clarify the difference between a removal action and a corrective action as the two phrases seem to be used for different remedial actions.

**The distinction will be clarified in the text as such: Removal actions are CERCLA response actions performed prior to the selection of a final remedy in the approved ROD, while corrective actions refer to remedial actions at RCRA/UST sites. Selected alternatives in an approved ROD are termed remedial actions.**

5. Section 4.3.4, Parcel C2b IRP Sites: The definition of Parcel C2b and its appropriate Environmental Condition Category (ECC) ranking have not been clearly defined in the report. The figures in the report indicates the site is around the footprint of Building (B) 51, with an ECC ranking of 5, but numerous references in the text state different ECC rankings and building references for the site (e.g., Table 1-1 lists Parcel C2b as Building 1, Castle Air Museum Storage, Table 4-9 includes the B51/B54 Group with an ECC of 5, and Table 4-4 lists Parcel C2b as Building 47 with an ECC ranking of 3). Please revise the report to clearly state the ECC ranking and the boundaries of Parcel C2b.

**Parcel C2b does consist of B51 and is classified as ECC 5. Tables 1-1 and 4-9 are both correct. B51 is used for Castle Air Museum storage (Table 1-1) and is part of the B51/B54 Group, which is classified as ECC 5 (former Table 4-9). However, references to B47 in Section 4.3.4 and former Table 4-4 are incorrect and will be changed to B51 (with a classification of ECC 5).**

**Response to DTSC Comments  
on the Supplement to the Basewide Environmental Baseline Survey  
Consolidated Parcels A, C1, C2a, C2b, E, F1, F2, F3, G1DK, G2, G3,  
G4, G5, G6, H2, I, J1b 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 1, Executive Summary. As this section states, several of the parcels included in the SEBS were originally classified as ECC 7. However, based on the information presented, it is difficult for the reader to follow the progression and rationale for the revised ECC classifications. Therefore, please include a detailed discussion, parcel by parcel, which summarizes the progression of removal or remedial actions taken to date in support of the current proposed ECC's.

**A new table (Table 1-4) will be created to summarize current ECC classifications with rationale/remedial action status to support these changes. This table will serve as a cross-reference guide with section references for detailed discussions of remedial activities/status for each IRP/PHO site by parcel. The table will be submitted with these responses for format approval.**

2. Section 1, Executive Summary, page 1-4. Please reference the date of the final signed OPS document.

**The date of the approved final Castle OPS (EPA 17Mar04 & DTSC 10Mar04) will be added to document references.**

3. Section 2.2, Boundaries of Parcel and Scope of Survey, page 2-1. In the second paragraph, please indicate in the SEBS documents that the environmental findings of the above parcels support justification for property transfer.

**Document will identify all available property is ready to transfer per CERCLA 120 h (3)**

4. Section 2.3, Site History and Current Use. Please indicate that legal property descriptions will be provided in the real estate transfer documents.

**The text will be revised as requested to indicate deed will contain legal property descriptions.**

5. Section 3.3, Inspections of Property Conducted. Prior to transfer, interior inspections must be conducted on all buildings to be transferred in order to document their current environmental condition. DTSC understands that site

inspections were conducted indoor and outdoor of the buildings referenced in the document, but since that time the buildings have been leased. Therefore in order to determine that no spills of hazardous substances or deterioration of Asbestos Containing Material (ACM) has occurred, the buildings must be inspected prior to concurrence of the FOST.

**The Air Force conducted exterior and interior visual inspections (Summer 2003 & confirmation March 2004) for the purpose of updating the property environmental conditions to include evaluation of the condition of known/suspected ACM and hazardous material storage practices on leased premises. The SBEBS and FOST have been updated to identify buildings in which damaged ACM was observed and provide updated hazardous material storage practices as they relate to specific facilities.**

6. Section 4.2.1, Hazardous Materials Management, page 4-2. Please include a brief narrative of the current status of the removal action for IRP site B871.

**The text will state that B871 was excavated and closed with regulatory approval. Details of remedial measures and closure at B871 are found in Section 4.3.7.**

7. Section 4.2.1, Hazardous Materials Management, page 4-3. The text references “(A) Hazardous Materials Storage” and “(B) Potential Releases of Hazardous Materials” which were identified during a VSI conducted May through July 2003. While the referenced hazardous materials and potential hazardous material releases may have occurred while leased to the County, it is ultimately the Air Force’s responsibility to ensure these potential environmental issues are addressed prior to transfer. DTSC will not concur that any of the buildings or parcels listed in this section are suitable to transfer until it has been documented that all hazardous material storage and/or spills have been adequately addressed. Please verify the current status of each building listed in Sections (A) and (B) accordingly.

**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.

8. Section 4.2.1.3, ECC 4 Sites, Table 4-7. The Air Force needs to better define the current remedial action status of the sites listed in this table. Of the 9 site listed, only Hangar F-4 has an approved closure report. Therefore, unless it can be documented and approved by the BCT that each site meets the definition of ECC 4, some of these sites may not be suitable for transfer at this time.

**Remedial actions have been completed and closure reports submitted for all sites in Table 4-7, except DA-4, B1314 and B1350. These sites will be excluded from the transferred property, unless AF receives regulatory closure approval prior to deed finalization.. The closure reports for sites F-4 and SS-2 have been submitted, but only F-4 has been closed with regulatory approval. SS-2 will also be excluded from the transferred property unless closure is approved prior to deed finalization. Site status will be updated in new Table 4-1 and site summary text.**

9. Section 4.2.3, Installation Restoration Program (IRP). This section describes the status of the 199 IRP sites located within the scope of the SEBS, 113 of which are currently designated as NFA (No Further Action) status. It is unclear, however, if the NFA sites are suitable for unrestricted use. Therefore, please include a table which details how NFA was reached for each site. The table should, at a minimum, include the designated site number, the removal or remedial action completed, the date of such completion, and if the site has been cleaned up to unrestricted use. The table should also reference the title and date of the environmental document relevant to each site, which would support the conclusion of suitable for unrestricted use.

**Table 4-2 lists all SCOU ROD 1 NFA-No Action sites. As stated in the footnote to the table, these sites were investigated during the SCOU RI/FS and recommended for NFA status. No removal or remedial actions were taken at these sites. A new table (Table 4-3) will be created to summarize the requested information for the SCOU ROD 2 NFA sites. As documented in both SCOU RODs, these sites are US EPA and State of California approved for unrestricted use. NFA status was granted by the US EPA and State of California regulatory agencies and demonstrates that site contamination does not exceed US EPA and State of California approved cleanup action levels for unrestricted residential use. Further details of site investigations and remedial actions are beyond the scope of this document, but are presented in the CB RI/FS – Part 2.**

10. Section 4.3.1.1. ECC 2 Sites. 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.**

11. Section 4.6, Pesticide Usage. The text states pesticides and herbicides were stored in buildings B907, B908, and B917 within Parcel A. Did the investigation of these buildings during the SCOU RI/FS include soil sampling around pesticide mixing areas? Please provide more narrative information regarding this topic in this section. It is unclear to the reader if only a visual inspection was conducted, or if soil sampling was also part of the investigation.

**During the SCOU RI, soil samples collected from the entomology yard (DA-7) and PFFA (vicinity of B908, B909 and B917) were analyzed for pesticides. The US EPA and State of California approved all soil sampling locations and analytical methodologies. No pesticides were detected in the samples. The US EPA and State of California agencies agreed that pesticide/herbicide storage and release at these facilities were no longer concerns.**

12. Section 4.7, Polychlorinated Biphenyls (PCBs). A review of this section indicates that at present the areas between B59 and B79, and B1348 are not suitable to transfer. Again, the purpose of the SEBS is to provide technical information which supports the recommendations in the FOST. DTSC understands that the inappropriate storage and release of PCBs resulted from action taken by the County of Merced or its tenants. However, if these releases are not addressed by the Air Force, or by oversight by the Air Force, these sites could become new IRP sites and therefore not suitable to transfer.

**The Air Force believes this area is suitable for transfer. 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 23 ppm; all other samples contained < 4.2 ppm PCBs; most samples were ND. The County of Merced also stored approximately four 55-gallon drums containing-oil (one of which leaked). The drum contents and soil was tested and PCB levels are below regulatory action levels. All items were removed from the yard by Merced County on 4 March 2004 and transported off-site for disposal. 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 SBEBS. The Air Force does not agree that the actions of the County of Merced could result in, "new IRP sites and therefore not suitable for transfer". As indicated previously, the**

**County of Merced entered into a signed lease in furtherance of conveyance identifying their “ownership” of all environmental violations caused by themselves or their sub-leases. The deed will contain language identifying County of Merced as responsible for any current and/or future environmental responses regulatory necessary as a result of their or their sub-leases actions.**

13. Section 4.10, Asbestos. This section states “most potential ACM was intact and in good condition”. However, it also lists several areas within buildings where damaged or potentially friable ACM exists. In addition, a thorough inspection of all buildings relevant to this SEBS has not been completed to date. Please address the issue of abatement of all areas within buildings which contain damaged or friable ACM. Also, until an inspection has been completed for all buildings proposed for transfer, DTSC will not concur that the buildings are suitable for transfer at this time.

**Agree that mis-statement regarding ACM condition and will be changed to reflect damaged ACM is present. Documents will identify building were damaged ACM observed. The Air Force has completed a recent visual site inspection for all buildings for the purposes of this transfer. The county of Merced entered into a signed lease in furtherance of conveyance, which identifies the County of Merced as responsible for any damaged or deteriorated ACM abatement required. The deed will identify location of damaged ACM and will provide for the County of Merced responsibility regarding any ACM abatement considered regulatory necessary.**

14. Section 4.11, Lead-Based Paint (LBP), The text does not address the potential for lead in soil. The bulleted items listed on page 4-40 describe the presence of chipping and/or peeling paint on the exterior of buildings. DTSC has determined lead in soil is a CERCLA hazardous substances release. Therefore, since the parcels contained in the SEBS have not been sampled for lead in soil, and a potential for contamination exists, the parcels are not suitable for transfer for unrestricted or sensitive use until it can be confirmed that no risk from lead in soil exists for future users. Therefore, please conduct representative sampling to determine if lead in soil is present. DTSC will work with the Air Force on the sampling strategy.

**See response to DTSC FOST comment #7.**

15. Figures. Please include a map which clearly illustrates which parcels are proposed for transfer and which parcels have been carved out from the property proposed for transfer which is supported by this SEBS.

**The SBEBS Plate 1 map has been updated to show all IRP/PHO sites & plumes as they exist in relationship to the parcels. All of the Parcels presented in the SBEBS are shown on Figure 1. Specific parcels to be transferred, as well as excluded parcels, are shown on FOST Figure 1.**

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

**No review comments were received from the RWQCB.**