TRAVIS AIR FORCE BASE
ENVIRONMENTAL RESTORATION PROGRAM

ANNUAL REPORT ON THE STATUS OF LAND USE CONTROLS ON RESTORATION SITES IN 2013

FINAL

Air Force Civil Engineer Center
Western Region Installation Support Team
Travis Air Force Base, California

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LAND USE CONTROLS
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IN 2013

Final

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List of Acronyms and Abbreviations

AFB	Air Force Base
AFCEC	Air Force Civil Engineer Center
AFCEE	Air Force Center for Engineering and the Environment
CAMU	Corrective Action Management Unit
COC	Chemical of Concern
COEC	Chemical of Ecological Concern
ECC	Environmental Chemical Corporation
EPA	U. S. Environmental Protection Agency
ERP	Environmental Restoration Program
GMU	Grazing Management Unit
GP	General Plan
IST	Installation Support Team
LUC	Land Use Control
NEWIOU	North/East/West Industrial Operable Unit
OSHA	Occupational Safety and Health Administration
PAH	Polynuclear Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
POCO	Petroleum Only Contamination
RA	Remedial Action
RD	Remedial Design
RI	Remedial Investigation
ROD	Record of Decision
RPM	Restoration Program Manager
WABOU	West/Annexes/Basewide Operable Unit

1.0 Introduction

The *Soil Record of Decision (ROD) for the West/Annexes/Basewide Operable Unit (WABOU)* (Travis AFB, 2002) and the *North/East/West Industrial Operable Unit (NEWIOU) Soil, Sediment and Surface Water (SSSW) ROD* (URS, 2006) are the legal documents that describe the selected remedies for twenty eight soil and sediment Environmental Restoration Program (ERP) sites on Travis Air Force Base (AFB). Sections 1 through 12 of this report describe the environmental conditions and status of land use controls assigned to the soil sites.

The *Groundwater Interim ROD for the WABOU* (CH2M HILL, 1999) and the *Groundwater Interim ROD for the NEWIOU* (URS, 1997) are the legal documents that describe the selected interim remedies for nineteen groundwater ERP sites on Travis AFB. Section 13 describes the environmental conditions and status of land use controls at these groundwater sites.

Alternative S2 (Land Use and Access Restrictions) is the selected remedial or contingent remedial alternative for nine of ten WABOU soil sites. Alternative #17 (Land Use Controls) is the selected remedial or contingent remedial alternative for ten of the eighteen NEWIOU soil and sediment sites. Both remedial alternatives provide the administrative and physical measures needed to restrict future land use, prevent unauthorized soil disturbance and removal activities, and/or ensure the effectiveness of the remedies at these nineteen sites.

The remedial action objective of Alternative S2 and Alternative #17 is to restrict residential development and unauthorized disturbance and relocation of soil. While the descriptions of Alternatives S2 and #17 differ slightly in the respective RODs, their objectives are identical.

For four WABOU sites (DP039, SD043, LF044, and SS046), Alternative S2 is the only selected remedy. For the remaining five active WABOU sites (LF008, RW013, SS041, SD042, and SD045), the WABOU Soil ROD selected an active remedy and Alternative S2 as a contingency remedy. The active remedy is required to reduce contaminant concentrations to industrial cleanup levels so that the sites are safe for base workers. Alternative S2 serves to restrict activity at those sites. Section 5.4 (Land Use Controls) of the WABOU Soil ROD describes these requirements in more detail.

Similarly, for five NEWIOU soil sites (SS015, SS016, ST032, SD033, and SD037), Alternative #17 is the only selected remedy. For the five remaining NEWIOU sites (SD001, FT003, FT004, FT005, and LF007), the NEWIOU SSSW ROD selected an active remedy and Alternative #17 as a contingency remedy. Because the active remedy is required to reduce contaminant concentrations to industrial cleanup levels, Alternative #17 serves to restrict activity at those sites to industrial uses only. Section 5.4 (Land Use Controls [LUC]) of the NEWIOU SSSW ROD describes these requirements in more detail.

If the active remedy reduces contaminant levels to those that allow for unrestricted use and unlimited exposure, there is then no need for LUCs. Each ROD states that the LUC alternative requirements will be deleted for a site in the event that the cleanup achieves levels for all contaminants that allow for unlimited use and unrestricted exposure at the site. In 2002 and 2003, Travis AFB conducted soil excavations at LF008, RW013, SS041, and SD042; and all four

excavations achieved these levels. In 2007, Travis AFB conducted soil excavations at FT003, FT004, LF007E, and SD045. These actions also achieved cleanup levels that allow for unrestricted use and unlimited exposure. As a result, no LUCs are in place at these sites; however, with regard to the remainder of LF007 (a closed municipal landfill within the NEWIOU) land use controls will remain in place.

One active remedy (Alternative S6 for WABOU soil sites and Alternative #18 for NEWIOU soil sites) consists of excavation and placement of contaminated soil in a Corrective Action Management Unit (CAMU). Alternative #18 also allows soil to be sent to an off-base landfill. A CAMU is a designated on-base area that is designed to receive and consolidate contaminated soil. The location of the Travis AFB CAMU is within the boundaries of Site LF007. The CAMU received contaminated soil from other soil sites during the 2003 and 2007 soil remedial actions.

Site SD045 is a soil site where a LUC had been established as a contingency remedy but was removed after a soil remedial action had returned the site conditions to unrestricted use and unlimited exposure. SD045 had been a part of previous inspections and had been discussed in previous annual LUC reports. After the soil remedial action report that described the cleanup work at SD045 had been finalized, the warning sign at the gated entrance was removed. SD045 will not be a part of future LUC inspections or reports.

Site ST032 is a site that had been a part of previous inspections and had been discussed in previous annual LUC reports. In April 2009, ST032 was transferred to the Petroleum Only Contamination (POCO) program, which addresses locations with fuels and other petroleum contaminants. POCO sites receive regulatory oversight from the San Francisco Bay Regional Water Quality Control Board. The final *Recommendation to Transfer ERP Site ST032 to the POCO Program Technical Memorandum* (CH2M HILL, 2009) provides the rationale for the site transfer to the POCO program. This transfer did not change the field activities at ST032; however, this site will no longer be mentioned in annual LUC reports.

Site SD001 is a sediment site, and site SD033 has a sediment component. For site SD001 and the sediment portion of site SD033, Alternative #17 was selected to protect ecological receptors in the event that the active remedy did not reduce contaminant concentrations to below ecological risk levels. In 2009, Travis AFB conducted sediment remedial actions at both sites and achieved cleanup levels below ecological risk levels. The final *Sites SD001 and SD033 Remedial Action Report* (ITSI, 2010) describes these sediment remedial actions and the cleanup levels attained. As a result, no sediment LUCs are in place at these sites.

Site FT005 is a site where a soil LUC had been established as a contingency remedy but was removed after a 2012 soil remedial action had returned the site conditions to unrestricted use and unlimited exposure. FT005 had been a part of previous inspections and had been discussed in previous annual LUC reports. The Final *FT005 Remedial Action Report* (ITSI Gilbane, 2012) describes the soil remedial action and the achievement of residential cleanup levels. As a result, no soil LUC is in place at this site.

On 05 March 2014, Mr. Glenn Anderson and Mr. Lonnie Duke from the Air Force Civil Engineer Center (AFCEC) Installation Support Team (IST) office on Travis AFB conducted a formal inspection of the Travis AFB LUCs at nine soil sites, several on-base groundwater sites, and the three off-base groundwater sites. The inspection was conducted concurrently with a contractor site orientation visit to assist with the transition to a new Performance-based Contract that addresses both soil and groundwater remediation. The nine soil sites are designated as SS015, SS016, SD033, SD037, DP039, SD043, LF044, SS046, and LF007. The groundwater sites are listed in Section 12. This report serves as the official record of the results of this inspection.

The following list provides a brief summary of the organization and content of the 2013 LUC Status Report:

- Section 1.0 – Introduction. Provides descriptions of the purpose, regulatory background and content of this annual report.

- Section 2.0 – Performance Measures. Describes the performance measures for LUCs. Subsections describe how these measures have been met.

- Section 3.0 – Solvent Spill Area (SS015). Describes the environmental conditions at the Solvent Spill Area and Facilities 550 and 552 and the status of LUCs at that site.

- Section 4.0 – Oil Spill Area (SS016). Describes the environmental conditions at the Oil Spill Area, Facilities 11, 13, 14, 20, 42, 1941, 139, and 144 and sections of the Storm Sewer Right-of-Way and the status of LUCs at that site.

- Section 5.0 – Storm Sewer System B, Facilities 810 and 1917, and South Gate Area (SD033). Describes the environmental conditions at this site and the status of LUCs.

- Section 6.0 – Sanitary Sewer System (SD037). Describes the environmental conditions at the Sanitary Sewer System; Facilities 837, 838, 919, 977, and 981; Area G Ramp; and the Ragsdale/V Area and the status of LUCs at that site.

- Section 7.0 – Building 755 (DP039). Describes the environmental conditions at Building 755 and the status of LUCs at that site.

- Section 8.0 – Building 916 (SD043). Describes the environmental conditions at Building 916 and the status of LUCs at that site.

- Section 9.0 – Landfill X (LF044). Describes the environmental conditions at Landfill X and the status of LUCs at that site.

- Section 10.0 – Railhead Munitions Staging Area (SS046). Describes the environmental conditions at the Railhead Munitions Staging Area and the status of LUCs at that site.

- Section 11.0 – Landfill 2 (LF007). Describes the environmental conditions at Landfill 2 and the status of LUCs at that site.

- Section 12.0 – Travis AFB Groundwater Sites. Provides a general description of land use controls associated with contaminated groundwater sites.

- Section 13.0 – Conclusion and Summary of Findings. Summarizes the tenth year of managing LUCs in the WABOU and the seventh year of managing LUCs in the NEWIOU.

- Section 14.0 – Works Cited. Lists the documents used in the development of this annual report.

Appendices

- Appendix A – Photographs. Shows photographs of sites with LUCs.
- Appendix B – Memorandum on Institutional Land Use Controls at Travis AFB Groundwater Sites

2.0 Performance Measures

Section 5.4 (Land Use Controls) of both the WABOU Soil ROD and the NEWIOU SSSW ROD addresses the Air Force requirements and responsibilities for implementing, monitoring, maintaining, and enforcing identified LUCs. To assist the Air Force in meeting these responsibilities, each ROD describes performance measures for all LUC sites. The following subsections explain how these performance measures have been met.

2.1 Base General Plan Revisions

The first performance measure pertains to the Base General Plan (GP). The GP is a long-range planning document that provides a framework for selecting the locations of future facilities needed to carry out the base mission. Section 5.4 of each ROD required Travis AFB to incorporate within its GP all specific LUCs at each site, the reasons for the controls, and site-specific details to adequately describe them to base personnel. Once a soil remedial action is complete, the base updates the GP to include the site-specific restrictions, if needed.

As stated in the 2003 Annual Land Use Control Report, the GP revisions as described in the WABOU Soil ROD were completed in November 2003 and consisted of two parts. The first part updated the existing text to incorporate the LUC concept and how it impacts future property development. The second part consisted of a new Appendix E (Land Use Controls) for the GP. Appendix E discussed LUCs in depth and provided a detailed description of the specific controls required at each site. It also listed the responsibilities of base personnel and organizations in maintaining LUCs. An individual attachment for each site contained site-specific LUC maintenance instructions. Each attachment contained a site map and a recent photograph of the controlled area.

In 2006, Travis AFB completed a significant upgrade of the GP. The new GP was entirely web-based and was located on the Travis AFB Intranet, so it was only accessible to personnel with authorization to use the Travis AFB local area network. Base officials who are responsible for planning and carrying out large military construction (MILCON) or smaller infrastructure improvement projects that involve soil excavation could quickly obtain data from the GP on all restrictions (environmental, safety, flight line, etc.) assigned to base property.

In 2009, the GP on the Travis AFB Intranet had undergone another revision that was designed to standardize the format of this web-based document among Air Mobility Command installations. Also, a new GIS feature made it easy to locate controlled areas on a base map. Unfortunately, it also removed a number of hyperlinks to data files and LUC descriptions. As a result, the GP was not as useful for LUC management as the original web-based version. The information was on the server that supports the GP, but it was not readily accessible. In addition, some of the information in the GP was outdated and required an update.

In 2010, the Asset Management Flight contacted the web site designer in order to restore the links to the site-specific data files and LUC descriptions and to update the content of the

restoration portion of the GP. In response, the Flight had been given administrative rights to revise the content in the Travis AFB GP. As a result, the Branch was able to update the site descriptions, upload updated data files to the web site, and reconnect hyperlinks.

In 2013, automatic budget cuts to the national security budget were triggered by the Budget Control Act of 2011. Known as Sequestration, the Department of Defense complied with this law by reducing its spending in non-mission essential areas. One result of sequestration was the elimination/non-renewal of the Air Mobility Command contract for managing the servers that held the Travis AFB GP. At the time of the 2013 LUC inspection, the web-based fully-functional version of the Travis AFB GP was no longer available. To ensure that base personnel have access to the contents of the GP, the PDF file of the main body of the GP and a folder with the LUC data files were placed on the Travis AFB SharePoint site. As with the electronic version of the GP, the SharePoint site can only be accessed by personnel with authorization to use the Travis AFB local area network.

To support the long-term planning function at Travis AFB and other AF installations, AFCEC issued a contract to Jacobs Engineering Group to develop an Installation Development Plan (IDP) for each installation. Similar in structure and content to the original GP, the IDP summarizes the AF Comprehensive Planning Process and applies geospatial and written data (text, maps, tables, figures, photographs, etc.) to allocate resources through project programming, promote airfield safety, and enhance the general health and welfare of the natural and built environment. The IDP will be a living document that will serve as a blueprint for a sustainable installation.

The AFCEC IST at Travis AFB is working with Jacobs Engineering Group to transfer all LUC data from the last version of the GP into the IDP. After the upcoming Travis AFB Groundwater ROD is signed by all parties, the new IDP will be reviewed and updated with the new LUC restrictions imposed by the selected remedies.

2.2 Regulatory Agency Notification

The second performance measure involves the notification of the regulatory agencies of any base proposals for a major land use change at a site inconsistent with LUC objectives or the selected remedy, any anticipated action that may disrupt the effectiveness of the LUCs, any action that might alter or negate the need for LUCs, or any anticipated transfer of the property subject to the LUCs.

For the nine soil sites that are addressed in this report, there were no land use change proposals or activities in 2013 that were inconsistent with, disruptive of, or negated the need for LUCs. Also, no property transfers took place in the vicinity of the nine sites.

Section 5.4 [Land Use Controls (LUCs)] of the NEWIOU SSSW ROD specifies a period up to 10 days after discovery for regulatory agency notification of LUC changes or breaches as described above. It also describes the submission of a tentative plan for addressing the breach. Since Travis AFB made no notifications in 2013, the LUC inspection did not evaluate notification timeliness.

2.3 Existing Administrative Control Maintenance

The third performance measure requires the maintenance of existing administrative controls (e.g., through the review of excavation permits) while LUCs are in place. Overall, Travis AFB has not made any significant changes to its existing system of administrative procedures for tracking land use on-base.

The basic procedures to maintain administrative controls start with the AF Form 332 that must be approved before the start of any building project. The reviewers of this form compare the proposed building site with the constraints in the GP before approval. The base also uses an excavation permit for similar comparisons. However, beginning in January 2003, the Environmental Flight began to require the completion of an AF Form 813 (Request for Environmental Impact Analysis) for most AF Form 332s and prior to the submission of any excavation permit (60 AMW Form 55). These required procedures provide further assurance that proposed projects are subjected to an appropriate level of environmental analysis. This procedural change was minor in nature, because base personnel were already required to submit an AF Form 813 to the Asset Management Flight in the early stages of a construction project. However, by requiring the attachment of a copy of the completed AF Form 813 to the excavation permit during the review process, the Asset Management Flight is able to verify that environmental issues pertaining to the proposed project are properly considered and addressed.

In 2010, the base began to use an electronic AF Form 813 to speed up the approval process and make it easier to track submitted forms. This conversion to an electronic format was in accordance with Air Mobility Command directives.

In 2013, another result of sequestration was the transition from the electronic AF Form 813 back to the paper version. The 60th Civil Engineer Squadron continues to manage the AF Form 813 review and approval process for Travis AFB.

During the 2013 LUC inspection, the reviewers noted that all LUCs at the nine soil sites that are addressed in this report were intact. There were no indications of improper land use or soil disturbance in any of the controlled areas. Based on the site inspections and periodic attendance in project coordination meetings throughout 2013, the reviewers concluded that the existing administrative measures are properly maintaining the LUCs.

2.4 Periodic Monitoring

Periodic monitoring is the final performance measure in both RODs. Officially, Travis AFB is required to conduct annual inspections of its controlled areas and to take prompt action to restore, repair, or correct any LUC deficiencies or failures identified. Also, the RODs provide the flexibility to select a different monitoring schedule as long as all parties agree with it and if the change reasonably reflects the potential risk presented by the site.

The AFCEC IST at Travis AFB has two restoration project managers who routinely visit various environmental and construction projects. As a result, site visits take place on at least a quarterly

(and often more frequent) basis, with few exceptions. Sections 1 through 12 now list any specific activities or incidents that resulted in more frequent site visits. Any potential LUC deficiencies are investigated promptly. During this reporting period, there were no major LUC deficiencies that required restoration, repair or correction.

2.5 Other Monitoring Requirements

In addition to the LUC requirements described above for all sites, the RODs require the following measures at some sites:

2.5.1 Signs

Specific sites will have appropriate signs on display to warn site visitors of potential hazards associated with surface soil contamination, conforming to ANSI Z 53.1 and Unified Facilities Criteria 3-120-01 (Air Force Sign Standard), which supersedes AFP 88-40 (Sign Standards).

In 2003, Travis AFB placed signs at all WABOU sites with LUCs. In 2006, the base placed signs at SS016 and the soil portion of SD033. Sites SS015 and SD037 did not receive signage because of incompatibilities with safe vehicle or aircraft operations. Appendix A (Photographs) presents photographs taken during the 2013 inspection that show the signs that have been posted at LUC sites.

The NEWIOU SSSW ROD specified that signs for NEWIOU sites where there would be no soil remedial activities needed to be installed within 30 days of signing the NEWIOU SSSW ROD. The 2006 Annual Land Use Control Report states that the base met this requirement.

2.5.2 Use of Clean Soil

At sites where the selected remedy involves soil excavation, Travis AFB is required to backfill the excavation voids with clean soil. This removes the potential for exposure to surface soil contaminants. If there is any residual contamination at depth, the excavation permit process is used to ensure that future industrial activities or construction projects either do not disturb the contaminated subsurface soil or that the base takes appropriate mitigation measures.

In 2002 and 2003, Travis AFB conducted soil cleanup actions at four of the five ERP sites that are addressed in the WABOU Soil ROD. They are LF008, RW013, SS041, and SD042. All four actions achieved cleanup levels that allow for unlimited use and unrestricted exposure, so there is no residual contamination at depth that requires the implementation of LUCs. The LF008 soil remedial action is described in detail in the *Remedial Action Report for Soil Remedial Action at Site LF008* (Shaw Environmental and Infrastructure [E&I], 2004). The RW013 soil remedial action is described in detail in the *Remedial Action Report for Soil Remedial Actions at Site RW013* (Environmental Chemical Corporation [ECC], 2003). The SS041 soil remedial action is described in detail in the *Remedial Action Report for Soil Remedial Actions at Site SS041* (ECC, 2003). The SD042 soil remedial action is described in detail in the *Remedial Action Report for Soil Remedial Action at Site SD042* (Shaw E&I, 2003).

In 2007, Travis AFB conducted soil cleanup actions at site SD045 as described in the WABOU Soil ROD and sites FT003, FT004, and LF007 Area E as described in the NEWIOU SSSW ROD. All four actions achieved cleanup levels that allow for unrestricted use and unlimited exposure, so there is no residual contamination at depth that requires the implementation or continuation of LUCs. The *North, East, and West Industrial Operable Unit and West/Annexes/Basewide Operable Unit Soil Remedial Action for Sites SD045, FT003, FT004, FT005, Union Creek SD001 and SD033, and LF007 Area E Report* (Shaw E&I, 2008) describes the completed soil remedial actions at sites SD045, FT003, FT004, and LF007 Area E.

2.5.3 Landfill X

The WABOU Soil ROD requires Travis AFB to install a fence around the Landfill X area and the adjacent equipment training area, build protective berms to prevent the transport of soil contamination via surface water flow during rain events into nearby vernal pools, and comply with applicable OSHA regulations, including relevant worker notification, training, and protective measures.

In 2003, Travis AFB completed the installation of a fence and berm at Landfill X. The details of this soil action are found in the *Remedial Action Report for the Soil Remedial Actions at Site LF044* (ECC, 2003).

Starting in 2010, Travis AFB stopped the use of the Landfill X area for heavy equipment training as provided for in the WABOU Soil ROD. The footprint of the Landfill X area that is not a part of the aboveground tank construction project (described in section 10) is too small to use as a heavy equipment training area.

2.5.4 Report Submittal

In accordance with both RODs, Travis AFB is required to submit in a timely manner to the U.S. EPA, California Department of Toxic Substances Control, and the San Francisco Regional Water Quality Control Board an annual monitoring report on the status of LUCs and/or other remedial actions, including the operation and maintenance, and monitoring thereof, and how any LUC deficiencies or inconsistent uses have been addressed.

A hard copy of this report has been placed in the Travis AFB Information Repository at the Vacaville Cultural Center Library, and an electronic copy of this report will be accessible through the environmental portion of the Travis AFB Public Web Site (www.travis.af.mil/enviro). Although this report is not subject to approval and/or revision by EPA and the State of California regulatory agencies, Travis AFB will voluntarily consider any suggestions from the regulatory agencies and the public to improve the format and/or content of future reports.

3.0 Solvent Spill Area and Facilities 550 and 552 (SS015)

SS015 is in the central part of the NEWIOU and consists of the Solvent Spill Area (SSA) and Facilities 550 and 552. The SSA covers approximately 1.4 acres east of Facility 550, in an area previously used for stripping paint from aircraft and where solvent spills were reported to have occurred. The site was an open grassy plot adjacent to an asphalt driveway and Facility 552.

Facility 552 consisted of a fenced, bermed, concrete pad constructed in 1964 and used as a temporary hazardous waste collection point. Stored wastes included paint, chromic acid, and solvents generated during aircraft maintenance operations at Facility 550. Facility 550 contained a corrosion control facility that treated and painted aircraft parts and support equipment. A metals-processing shop in Facility 550 used cadmium-based plating solutions.

In 2004, Facilities 550 and 552 were demolished to build a petroleum, oil, and lubricants (POL) facility under a military construction (MILCON) project. The facility consists of an office building, a fuel truck maintenance building, and a large, concrete truck parking area.

3.1 Environmental Conditions

Surface soil in the vicinity of the former metals-plating shop in Facility 550 contains cadmium residue. Appendix H of the *Summary of Remedial Investigation Data and Risk Management Decisions for Human Health at NEWIOU Sites* (URS, 2004) presents a more detailed description of the human health risk assessment for this site.

Currently, the cadmium-contaminated soil is covered by concrete from the truck parking area, which is divided into individual parking stalls and entrance/exit lanes. A fence surrounds the POL facility. The footprint of the environmentally-controlled area is small in relation to the large footprint of the truck parking area, so it is impractical and somewhat unsafe from an operations perspective to place warning signs in the vicinity of the contaminated soil.

3.2 Status of SS015 Land Use Controls

Section 5.3.8 of the NEWIOU SSSW ROD states that Alternative #17 (Land Use Controls) is the selected remedial action for this site, because cadmium concentrations in the soil exceed levels that allow for unlimited use and unrestricted exposure. The Air Force is to restrict residential development and unauthorized disturbance and relocation of soil at this site.

The Travis AFB General Plan describes the presence of cadmium in the surface soil and the associated land use restrictions, particularly on the unauthorized disturbance and use of the soil beneath the concrete at this site.

The 2013 inspection of the LUCs at SS015 found that administrative controls and existing physical infrastructure are adequate to enforce the environmental restriction. In addition, the

inspectors noted a potential for additional physical barriers (i.e., fences) and signage to adversely impact vehicle operations. There is no evidence that the cadmium-impacted soil beneath the concrete parking area has been disturbed. Photograph 1 in Appendix A of this report shows the controlled area at SS015.

SS015 is located on the southern side of Hickam Avenue, which is a primary access road when visiting restoration sites on the western part of the base. SS015 is located between the AFCEC IST office and the CH2M HILL office on Travis AFB, so at least one restoration project manager and/or contractor field specialist drive by the controlled area of SS015 every month.

4.0 Oil Spill Area, Facilities 11, 13/14, 20, 42/1941, 139/144, and Selected Sections of the Storm Sewer Right-of-Way (SS016)

SS016 is in the central part of the NEWIOU and consists of the Oil Spill Area (OSA); Facilities 11, 13/14, 20, 42/1941, and 139/144; and portions of the Storm Sewer Right-of-Way. The OSA covers approximately 7 acres north of Facility 16. The facilities within the site support flight line service equipment repair, aircraft engine repair, fuel storage, aircraft wash racks, and vehicle maintenance.

The OSA originally encompassed an area where waste oil from cleaning and degreasing operations at Facility 18 had reportedly been spilled or disposed of on a grassy field. The area is now entirely paved and covered with buildings. Facility 139 is a vehicle maintenance shop, and facility 144 is a vehicle body shop. Facilities 13 and 14 were used for paint stripping and parts cleaning, using TCE and a dilute phosphoric acid solution; the facilities were demolished in 1988. Facility 11 is a vehicle maintenance shop, and facilities 42/1941 include a wash rack, oil-water separator, and four 250-gallon above-ground storage tanks. Facility 20 is the aircraft control tower.

4.1 Environmental Conditions

Surface soil in a grassy field west of facility 18 contains polynuclear aromatic hydrocarbon (PAH) residue. Appendix I of the *Summary of Remedial Investigation Data and Risk Management Decisions for Human Health at NEWIOU Sites* (URS, 2004) presents a more detailed description of the human health risk assessment for this site.

A small portion of PAH-contaminated soil is covered by concrete and a brick walkway.

4.2 Status of SS016 Land Use Controls

Section 5.3.9 of the NEWIOU SSSW ROD states that Alternative #17 (Land Use Controls) is the selected remedial action for this site, because PAH concentrations in the soil exceed levels that allow for unrestricted use and unlimited exposure. The Air Force is to restrict residential development and unauthorized disturbance and relocation of soil at this site.

The Travis AFB General Plan describes the presence of PAH in the surface soil and the associated land use restrictions, particularly on the unauthorized disturbance and use of soil at this site.

The 2013 inspection of the LUCs at SS016 found that administrative controls are adequate to enforce the restriction, so physical barriers (i.e., fences) are not needed. There is no evidence that the PAH-impacted soil has been disturbed. A warning sign has been posted on a tree in the middle of the site to notify base workers of the presence of the controlled area. Photograph 2 in Appendix A of this report shows the controlled area at SS016.

The controlled area at SS016 is located three blocks from the AFCEC IST office, and an AFCEC restoration project manager drives by the controlled area during visits to the Central Groundwater Treatment Plant. As a result, at least one AFCEC restoration project manager drives by the controlled area on a monthly basis.

5.0 Storm Sewer System B (West Branch of Union Creek), Facilities 810 and 1917, and South Gate Area (SD033)

SD033 is in the western part of the NEWIOU and consists of the West Branch of Union Creek, parts of Storm Sewer System B, Facilities 810 and 1917, the area around the South Gate, and Outfall II. Storm Sewer System B collects runoff from within the west side of the aircraft industrial area. This runoff enters Union Creek at Outfall II. Facility 810 is used to refurbish aircraft, and facility 1917 has sumps and an oil/water separator that are no longer in use.

5.1 Environmental Conditions

Surface soil on the east and west side of facility 810 contains cadmium and benzo(a)pyrene residue. All of this soil is covered by asphalt. Appendix N of the *Summary of Remedial Investigation Data and Risk Management Decisions for Human Health at NEWIOU Sites* (URS, 2004) presents a more detailed description of the human health risk assessment for this site.

Sediment in the portion of the west branch of Union Creek that enters the main branch of the creek contained Polynuclear Aromatic Hydrocarbons (PAH). Section 5.2 [SD033-SSSB and West Branch of Creek (Drainage Basin 2)] of the *North/East/West Industrial Operable Unit Ecological Technical Memorandum* (URS, 2005) presents a more detailed description of the ecological assessment for this site.

5.2 Status of SD033 Land Use Controls

Section 5.3.14 of the NEWIOU SSSW ROD states that Alternative #17 (Land Use Controls) is the selected remedial action for the soil portion of this site, because cadmium and benzo(a)pyrene concentrations in the soil exceed levels that allow for unrestricted use and unlimited exposure. The Air Force is to restrict residential development and unauthorized disturbance and relocation of soil at this site.

Section 5.3.14 of the NEWIOU SSSW ROD also states that Alternative #18 (Excavation) is the selected remedial action for the sediment portion of this site, because the PAHs pose a potential ecological risk. Alternative #17 is the selected contingency remedy if concentrations of PAHs remaining in sediment after excavation exceed levels that allow for unrestricted use and unlimited exposure.

In 2009, Travis AFB successfully carried out a sediment remedial action in the Union Creek portion of SD033. The sediment cleanup levels were achieved at all sampling locations. As a result, no LUCs are in place in the Union Creek portion of this site. The *Sites SD001 and SD033 Remedial Action Report* (ITSI, 2010) describes the sediment remedial actions and the attainment of sediment cleanup levels in detail.

The Travis AFB General Plan describes the presence of cadmium and benzo(a)pyrene in the surface soil and the land use restriction, particularly on the unauthorized disturbance and use of soil at this site.

The 2013 inspection of the LUCs at the soil portion of SD033 found that administrative controls are adequate to enforce the restriction, so physical barriers (i.e., fences) are not needed. There is no evidence that the cadmium- and benzo(a)pyrene-impacted soil has been disturbed. Warning signs have been posted on both sides of Facility 810 to notify base workers of the presence of the controlled areas. Photographs 3 and 4 in Appendix A of this report show the controlled soil areas at SD033.

The two controlled areas at SD033 are located in an industrial area adjacent to the west side of the aircraft parking ramp. However, because of the site's somewhat detached location in relation to nearby solvent plumes, the AFCEC IST restoration project managers visited both controlled areas an average of about once a quarter.

6.0 Sanitary Sewer System; Facilities 837/838, 919, 977, and 981; Area G Ramp; and Ragsdale/V Area (SD037)

SD037 is in the western part of the NEWIOU and consists of Facilities 837, 838, 919, 977, and 981; the Area G Ramp; and the Ragsdale/V Street. It also includes approximately 22,000 feet of sanitary sewer piping, an oil/water separator, sumps, wash racks, and a fuel-hydrant system. The sanitary sewer system conveys domestic and industrial wastewater from facilities within the NEWIOU to the Fairfield-Suisun publicly owned treatment works. Facility 919 is used to maintain heavy equipment, facility 977 is an air freight terminal, and facility 981 has a hazardous waste satellite accumulation point.

6.1 Environmental Conditions

Surface soil to the southwest and southeast of facility 977 contains polynuclear aromatic hydrocarbon (PAH), lead, and total petroleum hydrocarbon (TPH) residue. Both controlled areas are covered in asphalt and lie in busy areas where aircraft receive and deliver palletized cargo from loading vehicles. Appendix R of the *Summary of Remedial Investigation Data and Risk Management Decisions for Human Health at NEWIOU Sites* (URS, 2004) presents a more detailed description of the human health risk assessment for this site.

6.2 Status of SD037 Land Use Controls

Section 5.3.18 of the NEWIOU SSSW ROD states that Alternative #17 (Land Use Controls) is the selected remedial action for this site; because PAH, lead, and TPH concentrations in the soil exceed levels that allow for unrestricted use and unlimited exposure. The Air Force is to restrict residential development and unauthorized disturbance and relocation of soil at this site.

The Travis AFB General Plan describes the presence of PAH, lead, and TPH in the surface soil and the land use restriction, particularly on the unauthorized disturbance and use of soil at this site.

The 2013 inspection of the LUCs at SD037 found that administrative controls are adequate to enforce the restriction, so physical barriers (i.e., fences) are not needed. Although the contaminated soil cannot be seen (since it is covered with asphalt), the asphalt work area surrounding Building 977 is in excellent condition and has not required maintenance in the past year. So, there is no evidence that the PAH-, lead-, and TPH-impacted soil has been disturbed.

SD037 is located south of Ragsdale Street, which is a main thoroughfare on the west side of the base. However, because of a major road construction project that diverted traffic away from an ammunition loading parking ramp, access to SD037 requires a more time-consuming, indirect route. On an average, an environmental restoration project manager views the controlled area about three times annually.

Due to the nature of operations at the air freight terminal, it is not practical or safe to post warning signs to notify base personnel of the presence of contaminated soil beneath the asphalt. Specifically, vehicles that are designed to transport large cargo pallets to and from both military and commercial aircraft require an open area free of physical hazards. The two small controlled areas lie in the middle of these open work areas, and there are no existing posts or structures that could be used to post signs that point out their location. Because of the high tempo of mission-critical operations associated with the air freight terminal, any obstructions would pose significant risk to both personnel and equipment. Photographs 5 and 6 in Appendix A of this report show the controlled areas within the open work areas at SD037.

7.0 Building 755 (DP039)

Building 755 is the Travis AFB Battery and Electric Shop. The site consists of Building 755 and a former battery neutralization sump. Past operations have included the recharging and dismantling of lead-acid and nickel-cadmium batteries. Before 1978, lead-acid solutions were discharged into a sink inside Building 755. The pipeline from the sink led to a rock-filled sump approximately 65 feet northwest of the building. This practice was discontinued in 1978 when the pipeline was dismantled and reconnected to the sanitary sewer system. The sump was removed in 1993.

7.1 Environmental Conditions

Lead residue is the contaminant associated with the surface soil around the edges of the former sump area. Since the lead-acid solution entered the former sump through a subsurface pipe, the presence of lead in the surface soil is attributed to the deposition of small amounts of lead-contaminated subsurface soil during the 1993 sump removal action. The Human Health and Ecological risk assessments for Building 755 concluded that the lead residue does not pose an unacceptable risk to local workers or ecological receptors. Sections 4.1.7 and 4.1.8 of the *WABOU Remedial Investigation Report* (CH2M HILL, 1997) present more detailed descriptions of the risk assessments for Building 755.

In 2008, the base constructed a sustainable in situ bioreactor over the footprint of the former sump. Funded by the Technology Transfer Office at the Air Force Center for Engineering and the Environment, the DP039 bioreactor is designed to clean up residual solvent contamination associated with the former sump. Travis AFB obtained regulatory approval to authorize the construction of the bioreactor as a demonstration project. Data from this project supports the selection of final groundwater remedies in an upcoming Travis AFB Groundwater ROD. Also, the base shut down the existing Dual-Phase Extraction system to return the subsurface to steady-state conditions. The final *Sustainable Bioreactor Demonstration Work Plan Site DP039* (CH2M HILL, 2009) describes the bioreactor technology and its construction details.

As part of the bioreactor construction, the remedial action contractor excavated a 20’ x20’ x20’ void, centered in the middle of the former sump. The bioreactor footprint completely covers the lead-contaminated surface soil area. When the excavation began, the lead-contaminated soil was removed first and placed in a large bin. Soil sample collection and analysis was used to characterize the waste and to determine the amount of residual lead remaining in the soil at DP039. The details of the bioreactor construction and the disposal of the contaminated soil will be presented in an upcoming technical memorandum. The schedule for this technical memorandum has not been established, because the upcoming Travis AFB Groundwater ROD has a higher priority. Also, even if the soil LUC at DP039 was removed, the base would still be required to control the same square footage to protect the DP039 bioreactor. Once the ROD is signed, the base will issue the draft technical memorandum for regulatory review.

7.2 Status of DP039 Land Use Controls

Section 5.3.1 of the WABOU Soil ROD states that Alternative S2 (Land Use and Access Restrictions) is the selected remedial action for this site. The Air Force is to restrict residential development and unauthorized disturbance and relocation of soil at this site.

The Travis AFB General Plan describes the presence of lead in the surface soil and the land use restriction, particularly on the unauthorized disturbance and use of soil at this site.

The 2013 inspection of the LUCs at DP039 found that administrative controls and a LUC warning sign are still adequate to enforce the restriction, so physical barriers (i.e., fences) are not needed. The lead-impacted soil has been excavated and sent by truck to an appropriate landfill as a result of the bioreactor demonstration project. Travis AFB will continue to enforce the DP039 controls until the upcoming technical memorandum has received regulatory review and the base receives approval to modify the controls for this part of the site. Photograph 7 in Appendix A of this report shows the surface of the bioreactor over the controlled area at DP039. The warning sign that notifies visitors to the site of the presence of LUCs can be seen in the background. Building 755 was vacated and demolished in 2009.

The two AFCEC IST restoration project managers visited the controlled area at DP039 in 2013 to observe maintenance on the bioreactor and the phytoremediation study area. On average, they visited the site about once a quarter.

8.0 Building 916 (SD043)

Building 916 is an emergency electrical power facility. The diesel-powered generators inside the building sit above a cellar, or sump area, that also houses sump pumps. Prior to 1991, spilled diesel fuel from the generators and wash water were pumped out of the building through one of four pipes. The pipes discharged onto small concrete spillways constructed for erosion control on the side slope of the trapezoidal drainage channel that lies east of the building. From the spillways, wastewater flowed down the side-slope and into the drainage channel. This method of sump water disposal was discontinued in 1991.

There had been a fenced and graveled electrical transformer area on the southwest corner of the building. This area contained three liquid-filled transformers on top of a concrete pad. In 1992, one of the transformers developed a leak onto the concrete pad and ground surface. The base removed the transformers and pad in 1993.

8.1 Environmental Conditions

Polychlorinated Biphenyl (PCB)-1254 was detected in soil at concentrations that do not pose an unacceptable risk to local workers or ecological receptors. Sections 4.3.7 and 4.3.8 of the *WABOU Remedial Investigation Report* (CH2M HILL, 1997) present detailed descriptions of the human health and ecological risk assessments for Building 916, respectively.

PCB-1254 was detected in a groundwater sample immediately below the transformer area, and there was a possibility that PCB-1254 in subsurface soil is a source of ongoing groundwater contamination. Additional groundwater sampling in June 1999 demonstrated that there is no PCB-contaminated groundwater migrating from the site. The *Reevaluation of Soil and Groundwater Contamination at Building 916 (SD043)* Technical Memorandum (CH2M HILL, 2000) presents a detailed discussion on this groundwater sampling effort.

8.2 Status of SD043 Land Use Controls

Section 5.3.3 of the WABOU Soil ROD states that Alternative S2 (Land Use and Access Restrictions) is the selected remedial action for this site. The Air Force is to restrict residential development and unauthorized disturbance and relocation of soil at this site. As long as administrative controls are adequate to enforce the restriction, physical barriers (i.e., fences) will not be needed.

The Travis AFB General Plan describes the presence of PCB-1254 in the soil and the land use restriction, particularly on the unauthorized disturbance and use of soil at this site.

Section 4 of the *Annual Report on the Status of Land Use Controls on Restoration Sites* (Travis AFB, 2004) describes the construction of a concrete pad within the boundaries of the controlled area at SD043. A standby emergency generator had been placed on the pad; the purpose of the generator was to provide additional utility support to the air freight terminal, located in Building 977.

As a result of this construction activity within the controlled area, the Environmental Flight enlarged the footprint of the controlled area to incorporate the concrete pad beneath the generator and all utilities. The new footprint also includes the soil within 10 feet to the east, south and west of the concrete pad. The Flight also posted two warning signs on Building 916 to notify site workers and visitors of the presence of LUCs at SD043.

Since no soil samples were collected and analyzed as part of the generator installation project; any future projects on site, including any to expand, alter, or remove the infrastructure associated with the generator will include analysis of the soil to be impacted by project activities prior to project approval. Decisions on soil disturbance activities and the disposition of any excavated soil will be made based on the results of sample analysis. The expanded LUC footprint has been incorporated into the GP.

The 2013 inspection of the LUCs at SD043 found that administrative controls are adequately enforcing the restriction, so physical barriers (i.e., fences) are not needed. There is no evidence that any soil disturbances in the vicinity of the concrete pad and generator took place in 2013. Photograph 8 in Appendix A shows the east side of the generator and pad south of Building 916, and photograph 9 shows the warning signs in relation to the west side of the controlled area at SD043.

Although it is in the vicinity of several streets that allow access to other restoration sites, AFCEC IST restoration project managers visit the controlled area at SD043 about two to three times a year on average.

9.0 Landfill X (LF044)

Landfill X is not a landfill at all. It received this name because the past activities at this site had not been completely identified at the start of the WABOU Remedial Investigation. It comprises approximately 25 acres and is located within Grazing Management Unit (GMU)-2, a 126-acre parcel of land that had been used to graze horses. The soil contaminants are attributed to the asphalt and other construction debris that had been stockpiled onsite.

9.1 Environmental Conditions

Chemicals of Concern (COCs) detected in surface soils include benzo(a)anthracene, benzo(a)pyrene, and dibenz(a,h)anthracene. These contaminants are also chemicals of ecological concern (COECs) together with benzo(k)fluoranthene, fluoranthene, and pyrene. COCs detected in subsurface soils include benzo(a)anthracene, benzo(a)pyrene, and dibenz(a,h)anthracene, benzo(k)fluoranthene. These contaminants are also subsurface COECs together with anthracene, acenaphthene, benzo(b)fluoranthene, benzo(g,h,i)perylene, chrysene, fluoranthene, indeno(1,2,3-c,d)pyrene, phenanthrene, bis(2-ethlhexyl)phthalate, cadmium, lead, and silver. Sections 4.8.7 and 4.8.8 of the WABOU RI report present a detailed description of the human health and ecological risk assessments for Landfill X, respectively.

In the spring of 2010, Kinder Morgan for SFPP, LP (under a ground lease with Travis AFB and an agreement with the Defense Energy Support Center) made the preparations to construct a new above-ground storage tank (AST) fuel facility within the footprint of the LF044 controlled area. The placement of the fuel facility in the LF044 area was based on its proximity to an existing AST facility on base, as well as to an off-base fuel pipeline. The placement also avoided the destruction of vernal pools and other sensitive habitats at the alternative construction locations.

Prior to the start of the tank construction, earth-moving equipment removed vegetation, construction debris, and contaminated soil from the construction area. Most of the concrete debris was taken to Concrush, a construction material recycling company in Fairfield, CA. The vegetation, weathered asphalt, contaminated soil and other miscellaneous debris were sent to the Hay Road Landfill in Vacaville, CA. When this phase of the project was complete, the construction area had been scraped to the point where only native soil was exposed. Earth-moving operations continued to ensure that the foundations for the ASTs were level and met specified geotechnical standards and soil compaction requirements. Clean soil was then brought onto the construction site to build the secondary containment walls for the AST enclosures. Tank construction was complete by the summer of 2012.

9.2 Status of LF044 Land Use Controls

Section 5.3.6 of the WABOU Soil ROD states that Alternative S2 (Land Use and Access Restrictions) is the selected remedial action for this site. The selected remedy requires the installation of a fence around the contaminated area and the training/stockpile area and the construction of a protective berm within the fenced area. The purpose of the berm is to provide environmental protection by preventing soil contaminants from flowing during rain events into

nearby vernal pools. The Air Force is to restrict residential development and unauthorized disturbance and relocation of soil at this site. The objective of this remedial action is to document the location of the contaminants and apply land use controls to prevent the site from being used for residential purposes.

The Travis AFB General Plan describes the presence of the soil contaminants and the land use restrictions, particularly on the unauthorized disturbance and use of soil at this site. Now that the AST facility construction is complete, the base has reassessed the footprint of the controlled area while continuing to enforce the land use controls over the entire site. For the new tank facility, the restrictions associated with fuel operations are more stringent than the previous environmental restrictions and are under contractor management. For example, tank facility visitation is significantly limited and requires prior coordination. The base and the construction contractor are working jointly on a data report that describes the excavation and disposal of contaminated soil and construction materials from the construction area. The joint report will be used to seek regulatory concurrence to reduce the footprint of the LF044 controlled area to the area outside of the new tank facility. The base submitted a draft joint report for regulatory review in 2013 and is working with the Kinder-Morgan contractor to respond to agency comments.

The *Remedial Action Report for Soil Remedial Actions at Site LF044* (ECC, 2003) provides a detailed description of the construction of the physical controls at LF044. This report is the source of some of the information provided in the following subsections.

9.2.1 Fence and Gate Installation

Environmental Chemical Corporation (ECC) and a fencing subcontractor installed the fence according to RD Specification #02831 of the *LF044 Soil Remedial Design Package* (URS, 2002). ECC accommodated a request by TAFB to install an additional gate on the southeastern side of LF044 site along with the northern gate that accesses Hangar Avenue. Warning signs were posted at the gates and every 200 feet along the fence as required.

The 2012 inspection of the LUCs at LF044 found the fence and signs along all but the southern sides of the controlled area as well as the north gate had been removed and replaced with security fencing and a new gate to control entry into the tank facility. All contaminated soil and construction debris within the footprint of the new tank facility had been excavated and taken off-site. A significant portion of the security fence around the southern side of the new tank facility now serves as part of the fence around the remaining LF044 controlled area.

The 2013 inspection found several fence sections along the southern sides with broken strands. These deficiencies were noted in the past, but repairs were postponed until after the completion of the AST facility construction project. Now that the tank facility construction is complete, the base has identified fence repair and sign replacement tasks that will be carried out by the new Performance-based Contractor in 2014 to support the LUC restrictions.

There is no evidence to suggest that the property is being used for other than industrial purposes. The south gate was locked, and the AFCEC IST keeps a copy of the key. Photograph 10 of

Appendix A shows the small strip of land between the berm and the new AST containment enclosure. There is a chance that contaminated sediment may have migrated onto this land during prior rain events. Photograph 11 shows the north side of the LF044 fence, and photograph 12 shows the south gate and a warning sign.

9.2.2 Berm Construction

The berm was constructed with aggregate, type ABII. A total of 647.54 tons of ABII aggregate was imported for the berm construction. The material originated from a local quarry owned by Syar Industries. The material met the physical and chemical characteristics required by RD specification #02210 of the *LF044 Soil Remedial Design Package* (URS, 2002). The aggregate was placed along the surveyed and staked perimeter line. Following precision spreading, the berm was shaped and compressed using 6-inch maximum horizontal lifts. ABII aggregate has a good mixture of fines and course material, which made it easy to compact to the required 85% of laboratory maximum dry density.

The 2013 inspection of the LUCs at LF044 found the berm to be in good to excellent physical condition. However, there are secondary containment walls next to the LF044 berm that are designed to capture and hold 110% of the contents of the new tanks. These walls are much larger than the LF044 berm. As a result, the berm no longer serves its original purpose, which was to prevent the flow of contaminated sediment into nearby vernal pools. This is because the contaminated materials next to the berm have been removed, and the amount of land between the berm and the secondary containment walls is very small (as shown in Photograph 10), so a large amount of water will not accumulate between the berm and the containment walls. It is likely that the base will seek regulatory concurrence to remove the requirement for a berm from the LF044 controlled area in the upcoming joint Travis/Kinder Morgan report.

The AST facility construction contractor received a considerable amount of environmental oversight from the Asset Management Flight during the 2010 and 2011 summer construction seasons, primarily consisting of attendance in project review meetings and signing non-hazardous waste manifests. This level of involvement dropped when the tank facility construction was complete. On average, the LF044 controlled area was visited once a quarter in 2013.

10.0 Railhead Munitions Staging Area (SS046)

The Railhead Munitions Staging Area site consists of a railroad track and concrete pad that formerly served as a railhead at the south terminus of a spur off the Northern Sacramento Railroad. This site served as a weapons-handling facility from 1953 to 1962 and is within the explosive safety clear zone of a nearby conventional weapons storage facility.

10.1 Environmental Conditions

Chemicals of Concern (COCs) detected in surface soil include benzo(a)pyrene, benzo(b)fluoranthene, benzo(a)anthracene, and benzo(k)fluoranthene. COCs detected in subsurface soil include cadmium, lead, benzo(a)pyrene, benzo(k)fluoranthene, fluoranthene, phenanthrene, pyrene, and pentachlorophenol. All of the COCs were detected in the vicinity of the railroad tracks. Section 4.12.7 of the WABOU RI report presents a detailed description of the human health risk assessment for this site.

Chemicals of Ecological Concern (COECs) were detected in isolated areas surrounding the concrete pad. The COECs include benzo(a)pyrene, benzo(k)fluoranthene, fluoranthene, pentachlorophenol, phenanthrene, pyrene, cadmium, and lead. Section 4.12.8 of the WABOU RI report presents a detailed description of the ecological risk assessment for this site.

10.2 Status of SS046 Land Use Controls

Section 5.3.8 of the WABOU Soil ROD states that Alternative S2 (Land Use and Access Restrictions) is the selected remedial action for this site. The objective of this remedial action is to document the location of the contaminants and apply land use controls to prevent the site from being used for residential purposes. The Air Force is to restrict residential development and unauthorized disturbance and relocation of soil at this site.

The Travis AFB General Plan describes the presence of contaminants in the surface soil and the land use restriction, particularly on the unauthorized disturbance and use of soil at this site.

The 2013 inspection of the LUCs at SS046 found that administrative controls and two warning signs are adequate to enforce the restriction, so additional physical barriers (i.e., fences not associated with the Grazing Management Unit) are not needed. There is no evidence that the contaminated soil has been disturbed. Photograph 13 of Appendix A of this report shows the warning sign at the west end of the SS046 controlled area, and photograph 14 shows the warning sign at the east end of the controlled area.

The controlled area at SS046 is somewhat concealed by two large soil berms, so the AFCEC restoration project managers have to plan to check on its condition when visiting other nearby groundwater sites. They average a visit once a quarter.

11.0 Landfill 2 (LF007)

LF007 is a closed municipal landfill in the northeast corner of the base that was active from the 1950s to 1974. It is a NEWIOU restoration site that was selected in the WABOU Soil ROD as the location for the construction of the Corrective Action Management Unit (CAMU). There are also active operations at LF007 conducted at Buildings 1360 (Military Affiliated Radio Station), 1365 (Permitted Treatment, Storage and Disposal Facility), and 1370 (Small Arms Range).

11.1 Environmental Conditions

Alternative #17 is the selected remedial action in the NEWIOU SSSW ROD for the CAMU cover, CAMU associated features, the Landfill cover and associated buried wastes, and sample location E19. For PCB-contaminated soils in Area E, Alternative #18 (Excavation) is the selected remedy and Alternative #17 is the contingency remedy. Travis AFB elected to also excavate sample location E19, as described below.

The CAMU was built in three phases. Phase 1 involved landfill maintenance and consisted of the placement of large quantities of clean soil into subsidence trenches that formed in the original soil cap. The soil also served as a foundation for the CAMU. Phase 2 involved the placement of contaminated soil from WABOU soil sites into the CAMU and the construction of an evapotranspiration cap over the consolidated soil. Travis AFB completed the fieldwork for Phases 1 and 2 in November 2003. Phase 3 involved the placement of contaminated soil from NEWIOU and WABOU sites into the CAMU and the completion of the CAMU cap. The base completed the fieldwork for Phase 3 in December 2007.

The soil remediation of LF007 Area E and sample location E19 also took place during the 2007 fieldwork, and cleanup levels that allow for unrestricted use and unlimited exposure were achieved at both locations. The *North, East, and West Industrial Operable Unit and West/Annexes/Basewide Operable Unit Soil Remedial Action for Sites SD045, FT003, FT004, FT005, Union Creek SD001 and SD033, and LF007 Area E Report* (Shaw E&I, 2008) describes the completed soil remedial actions and the cleanup levels achieved at LF007 Area E and sample location E19.

The *Remedial Investigation Report for the North Operable Unit* (Radian, 1995) contains a detailed description of the LF007 environmental conditions. The *Design Report and Post-Construction Maintenance Plan for the LF007 Soil Remedial Action* (CH2M HILL, 2002) contains a detailed description of the CAMU design. The *Project Summary Report for the LF007 Soil Remedial Action Phase 1, Landfill Cap, Corrective Action Management Unit Subgrade, Wetlands Mitigation* (Shaw E&I, 2003) contains the description of the fieldwork that supports the closure of this landfill. The *Project Summary Report for the Site LF007 Phase 2 Soil Remedial Action* (Shaw E&I, 2004) describes the placement of contaminated soil from WABOU soil sites and the construction of the CAMU protective cap as well as other designed features. The NEWIOU Human Heath and Eco Tech Memos also describe environmental conditions at LF007.

In November 2008, the CAMU construction contractor conducted some maintenance on the evapotranspiration cap that involved the addition of clean soil to the top of the cap and the application of more hydroseed. No contaminated soil was disturbed by this maintenance activity.

11.2 Status of LF007 Land Use Controls

Section 4.2 of the WABOU Soil ROD describes the CAMU and its part of the selected remedies for WABOU soil sites. Section 5.3.6 of the NEWIOU SSSW ROD states that Alternative #17 is the selected remedial action for LF007 Areas A through D and a contingency remedy for Area E, as described above.

The Travis AFB General Plan describes the presence of the CAMU cover, CAMU associated features, and Landfill 2, and their land use controls. Travis AFB also does not allow unauthorized soil disturbance and relocation activities at LF007 and periodically inspects and actively monitors the CAMU to ensure that its integrity and function remain intact.

There is no established schedule for these periodic inspections. For example, they coincide with contractor site visits associated with CAMU maintenance and monitoring as well as groundwater sample collection in the northeast part of the base. The CAMU is also inspected when base representatives check on the wetland area north of the CAMU during the wet season to determine when the North Groundwater Treatment Plant should be shut down to prevent adverse wetland impacts. It is likely that this informal inspection frequency will continue for the next two or more years until all decision documents have been signed and all soil and groundwater remedies are in place.

The 2013 inspection of the LUCs at LF007 found that the current administrative and physical controls are adequate to enforce the restrictions. There is no evidence that the contaminated soil at LF007 has been disturbed or that the active operations at Buildings 1360, 1365 and 1370 are compromising the LUCs in place on the portions of LF007 discussed above.

Currently, the CAMU is in an Operation and Maintenance phase. Now that all CAMU phases are complete, the base prepared the CAMU for the eventual transition to a Long-Term Management phase by building a 6-foot high security fence with triple-strand barbed wire at the top around it. The fence was positioned to provide sufficient room for heavy equipment to move around the CAMU, and two custom-designed gates were placed at both ends to allow easy access for future field work. Photograph 15 in Appendix A of this report shows the northwest gate after the lysimeter was removed. Photograph 16 shows the warning sign on the northwest CAMU fence. Photograph 17 shows the northwest corner of the CAMU fence (and the bright orange delineators that are stored within the fenced area), and photograph 18 shows the warning sign at the LF007/CAMU entrance.

As a result of the monitoring of the large vernal pool to the north of the CAMU and inspections by AFCEC and contractor personnel, LF007 is visited an average of about once a month.

12.0 Travis AFB Groundwater Sites

Travis AFB has 19 contaminated groundwater sites that are being cleaned up under interim remedial actions. The *Groundwater Interim Record of Decision for the WABOU* (Travis AFB, 1999) addresses the interim remedies at four sites (LF008, SS041, SD043, and DP039), and the *Groundwater Interim Record of Decision for the NEWIOU* (URS, 1997) addresses the interim remedies at 15 sites (FT004, FT005, LF006, LF007, SS015, SS016, SS029, SS030, SD031, ST032, SD033, SD034, SS035, SD036, and SD037).

12.1 Environmental Conditions

Section 3 of the *Groundwater Interim Record of Decision for the NEWIOU* (URS, 1997) describes the nature and extent of groundwater contamination at the NEWIOU sites, and section 3 of the *Groundwater Interim Record of Decision for the WABOU* (Travis AFB, 1999) describes the nature and extent of groundwater contamination at the WABOU sites. Travis AFB also publishes an annual Groundwater Remediation Implementation Status Report that provides an update to the contaminant concentrations within and along the boundaries of the groundwater plumes.

12.2 Status of Groundwater Land Use Controls

Section 5.1.2 (Institutional Actions) of the *Groundwater Interim Record of Decision for the NEWIOU* (URS, 1997) describes the land use controls on NEWIOU groundwater sites, and section 5.6 (Land Use Restrictions) of the *Groundwater Interim Record of Decision for the WABOU* (Travis AFB, 1999) describes the land use controls on WABOU groundwater sites. These controls are designed to restrict access to the contaminated groundwater as well as manage soil excavation and other subsurface work where base and contractor personnel may encounter contaminated groundwater or vapors. These subsurface activities are only allowed after environmental and worker safety measures are in place. These controls are also used to prevent any inadvertent damage to groundwater treatment systems or any infrastructure that supports the interim groundwater remedies.

Additionally, in September 2008, the RPM placed a memorandum in the Travis AFB Administrative Record that documents the land use controls that are currently in place for the groundwater sites. The memorandum indicates that additional land use controls will be incorporated into the base General Plan to restrict on-base development of water supply wells and consumption of contaminated water. The memorandum also documents the government's rights under its easements to prevent residential development and well drilling activities on the off-base properties covered by its easements. Finally, the memorandum documents the notification protocols in the event of transfer of any property subject to land use controls. Appendix B contains a copy of this memorandum.

Travis AFB obtains its drinking water from two sources: a water treatment facility that is owned and operated by the City of Vallejo and a group of deep groundwater production wells at the Cypress Lakes Golf Course. As a result, the base does not use its groundwater for either

domestic or industrial use. It does use treated groundwater to recharge the Duck Pond, an on-base recreational area.

The Travis AFB General Plan describes the presence of groundwater contaminants and the restrictions on development of water supply wells and consumption of contaminated water. As described in Section 2.1, Travis AFB will amend its General Plan to document any additional land use restrictions once the final remedies are selected in the upcoming Travis AFB Groundwater ROD.

The 2013 inspection did not include a visit to all groundwater sites, particularly those in the high security areas where airfield operations take place. The three off-base easements were inspected to verify that no residential development or well drilling activities other than base remedial activities had taken place. Photograph 19 provides a view of the off-base property within the SS030 easement as seen from the South Groundwater Treatment Plant. Photograph 20 shows a portion of the groundwater extraction well network at SS029. Photograph 21 shows the vernal pool that forms above and adjacent to the closed landfill at LF007 each winter and the solar-powered groundwater extraction system along the base boundary.

For the on-base sites, a records review revealed no drinking water wells have been constructed. The on-base controls are procedural in nature and are based primarily on the administrative and worker safety tasks that base personnel and contractors must complete to obtain permission to excavate soil as part of a construction or repair project. All on-base plumes are located in industrial areas, and the footprint of most of them is covered by other, more stringent controls that are associated with aircraft/military operations. For example, the footprint of the LF008 plume is covered by quality distance safety arcs that prevent unauthorized activities near munitions storage facilities, and the footprint of the SS016 plume lies under aircraft runways and parking ramps and is covered by Federal Aviation Administration restrictions. There are no physical controls associated with these groundwater restrictions that can be inspected, so the weekly review by regulatory staff of excavation permits, work requests and environmental impact analyses is an effective means to ensure groundwater restrictions are enforced. Section 4.1.2 (Institutional Controls on Groundwater Use) of the *Third Five-Year Review Report* (Endpoint Consulting, 2013) provides a detailed description of the implementation of groundwater land use controls.

One administrative control that pertains to groundwater sites involves the protection of facilities against vapor intrusion. For all groundwater sites, the new construction of office facilities above solvent plumes requires the design and incorporation of passive ventilation systems. For existing offices, the base completed a *Vapor Intrusion Assessment Report* (CH2M HILL, 2010). When the EPA revised its toxicity values for several previously evaluated compounds, the base completed a *Vapor Intrusion Assessment Update Technical Memorandum* (CH2M HILL, 2012). One result of these assessments was the application of a LUC to Facility 18 within Site SS016 to limit its use to storage purposes only. This control ensures that the pathway between contaminated soil gas beneath Facility 18 and potential receptors remains incomplete. This control is documented in the base general plan and will not be removed until the cleanup levels as described in the Travis AFB Groundwater ROD are achieved.

There were several site characterization and maintenance activities at various groundwater sites (particularly LF007C) that took place throughout the dry season. Along with the other field activities that were mentioned in previous sections, the average number of site visits to groundwater sites by the AFCEC IST restoration project managers ranged from once per month to once every few months.

13.0 Conclusion and Summary of Findings

On 05 March 2014, representatives from the AFCEC Restoration IST conducted a formal inspection of the LUCs at nine soil ERP sites on Travis AFB. The nine sites are designated as SS015, SS016, SD033, SD037, DP039, SD043, LF044, SS046, and portions of LF007. This inspection complies with section 5.4 (Land Use Controls) of the WABOU Soil ROD and section 5.4 (Land Use Controls [LUC]) of the NEWIOU SSSW ROD. Several groundwater sites were included in the inspection.

The inspection team found the controls at the nine soil sites to be in place and effective at restricting land use to industrial purposes only or protecting ecological receptors from CERCLA contaminants. There is no evidence that any unauthorized land uses or unauthorized soil/sediment disturbances in the controlled areas took place in 2013. The inspectors did not identify any sites where the addition of physical barriers could improve LUC management.

Site SD045 was one of four sites that achieved unrestricted cleanup levels during the 2007 construction season, and the base removed the environmental controls from this site in 2008. Two sediment sites (SD001 and the sediment portion of SD033) also achieved unrestricted cleanup levels during the 2009 construction season, and the base removed the environmental controls from these sites in 2010. Site ST032 was transferred into the POCO program in 2009, and its environmental cleanup and LUCs are now coordinated through the San Francisco Bay Regional Water Quality Control Board. Site FT005 achieved unrestricted soil cleanup levels during the 2012 construction season, and the base removed the environmental controls from the soil portion of this site in 2012.

The inspectors noted that the construction of an aboveground storage tank (AST) facility within most of the LF044 footprint is complete. In the early stages of the project, the construction debris and contaminated soil in the central portion of LF044 were excavated and taken to either a local recycling facility or landfill, as appropriate. Once native soil was reached, heavy equipment continued to rearrange the topography, and clean soil was brought into the construction area to form the foundations and secondary containment walls for the ASTs. Now that this project is complete, the base is working with the tank facility contractor on a joint report that describes the environmental activities that took place during tank construction and the impact of the new facility on the LF044 LUCs. The base will continue to treat all of LF044 as an environmentally controlled area and enforce environmental LUCs until all comments on the draft report have been resolved and the report is finalized. All LUC revisions will be coordinated and approved by the environmental regulatory agencies before implementation.

In 2010, an additional layer of physical controls (a high security fence and two access gates) was designed and built around the CAMU to improve controlled access to this soil repository and eventually allow the CAMU to enter a future Long-Term Management phase with agency concurrence.

The inspectors noted that the lead-contaminated surface soil that required the placement of land use controls at site DP039 had been completely excavated as part of an unrelated groundwater cleanup demonstration project (bioreactor). The footprint of the bioreactor completely covered

the controlled area, so the bioreactor construction also removed the need for soil LUCs at this site. The base will document the excavation and disposal of the lead-contaminated soil in a technical memorandum that will be submitted when its schedule does not interfere with that of the Travis AFB Groundwater ROD. The base will maintain the DP039 soil LUCs until the regulatory agencies have had the opportunity to review this technical memorandum, accept its contents, and approve the removal of the soil restrictions.

The 2013 inspection did not include a visit to all groundwater sites. The three off-base easements were inspected to verify that no residential development or well drilling activities other than base remedial activities had taken place. For the on-base sites, a records review revealed no drinking water wells have been constructed. The remaining controls are procedural in nature and are based on the tasks that base personnel and contractors must complete to obtain permission to excavate soil as part of a construction or repair project. There are no physical controls associated with these groundwater restrictions that can be inspected.

As described in section 2.1, the web-based Travis AFB General Plan (GP) was removed from the AF Intranet as a result of sequestration. The GP's data files were placed on the Travis AFB SharePoint site so that base project managers still have access to them; the next major revision will pertain to the LUCs associated with the groundwater remedies that will be selected in the upcoming Travis AFB Groundwater ROD.

14.0 Works Cited

CH2M HILL, 1997. Final *Remedial Investigation Report* (Volumes 1-4). West/Annexes/ Basewide Operable Unit. Installation Restoration Program. 60th Air Mobility Wing, Travis Air Force Base, California. May.

CH2M HILL, 1999. Final *Groundwater Interim Record of Decision for the West/Annexes/Basewide Operable Unit*. Installation Restoration Program. Travis Air Force Base, California. June.

CH2M HILL, 2000. Final *Reevaluation of Soil and Groundwater Contamination at Building 916 (SD043)* Technical Memorandum. Installation Restoration Program. Travis Air Force Base, California. February.

CH2M HILL, 2002. Final *Design Report and Post-Construction Maintenance Plan for the LF007 Soil Remedial Action.* Installation Restoration Program. Travis Air Force Base, California. August.

CH2M HILL, 2009a. Final *Sustainable Bioreactor Demonstration Work Plan Site DP039.* Environmental Restoration Program. Travis Air Force Base, California. January.

CH2M HILL, 2009b. Final *Recommendation to Transfer ERP Site ST032 to the POCO Program Technical Memorandum*. Environmental Restoration Program. Travis Air Force Base, California. April.

CH2M HILL, 2010. Final *Vapor Intrusion Assessment Report*. Environmental Restoration Program. Travis Air Force Base, California. March.

CH2M HILL, 2012. Draft *Vapor Intrusion Assessment Update Technical Memorandum*. Environmental Restoration Program. Travis Air Force Base, California. September.

Endpoint Consulting, 2013. Final *Third Five-Year Review Report*. Environmental Restoration Program. Travis Air Force Base, California. September.

Environmental Chemical Corporation, 2003a. Final *Remedial Action Report for Soil Remedial Actions at Site LF044*. Environmental Restoration Program. Travis Air Force Base, California. October.

Environmental Chemical Corporation, 2003b. Final *Remedial Action Report for Soil Remedial Actions at Site RW013*. Environmental Restoration Program. Travis Air Force Base, California. August.

Environmental Chemical Corporation, 2003c. Final *Remedial Action Report for Soil Remedial Actions at Site SS041*. Environmental Restoration Program. Travis Air Force Base, California. August.

Environmental Chemical Corporation, 2003d. Final *Remedial Action Report for Soil Remedial Actions at Site LF044*. Environmental Restoration Program. Travis Air Force Base, California. October.

ITSI, 2010. Final *Sites SD001 and SD033 Remedial Action Report*. Environmental Restoration Program. Travis Air Force Base, California. July.

ITSI Gilbane, 2012. Final *FT005 Remedial Action Report*. Environmental Restoration Program. Travis Air Force Base, California. September.

Radian, 1995. Final *Remedial Investigation Report for the North Operable Unit*. Installation Restoration Program. Travis Air Force Base, California. July.

Shaw Environmental and Infrastructure, 2003. Final *Project Summary Report for the LF007 Soil Remedial Action Phase 1, Landfill Cap, Corrective Action Management Unit Subgrade, Wetlands Mitigation.* Environmental Restoration Program. Travis Air Force Base, California. September.

Shaw Environmental and Infrastructure, 2004. Final *Project Summary Report for the Site LF007 Phase 2 Soil Remedial Action*. Environmental Restoration Program. Travis Air Force Base, California. April.

Shaw Environmental and Infrastructure, 2008. Final *North, East, and West Industrial Operable Unit and West/Annexes/Basewide Operable Unit Soil Remedial Action for Sites SD045, FT003, FT004, FT005, Union Creek SD001 and SD033, and LF007 Area E Report*. Environmental Restoration Program. Travis Air Force Base, California. September.

Travis Air Force Base, 2002a. Final *Soil Record of Decision for the WABOU.* Installation Restoration Program. Travis Air Force Base, California. December.

Travis Air Force Base, 2002b. Final *Travis AFB General Plan*. Travis Air Force Base, California.

Travis Air Force Base, 2004. Final *Annual Report on the Status of Land Use Controls on Restoration Sites*. Environmental Restoration Program. Travis Air Force Base, California. January.

URS Corporation, 1997. Final *Groundwater Interim Record of Decision for the North, East. West Industrial Operable Unit*. Installation Restoration Program. Travis Air Force Base, California. December.

URS Corporation, 2002a. Final *Basewide Soil Remedial Design/Remedial Action Plan*. Installation Restoration Program. Travis Air Force Base, California. June.

URS Corporation, 2002b. Final *LF044 Soil Remedial Design Package*. Installation Restoration Program. Travis Air Force Base, California. July.

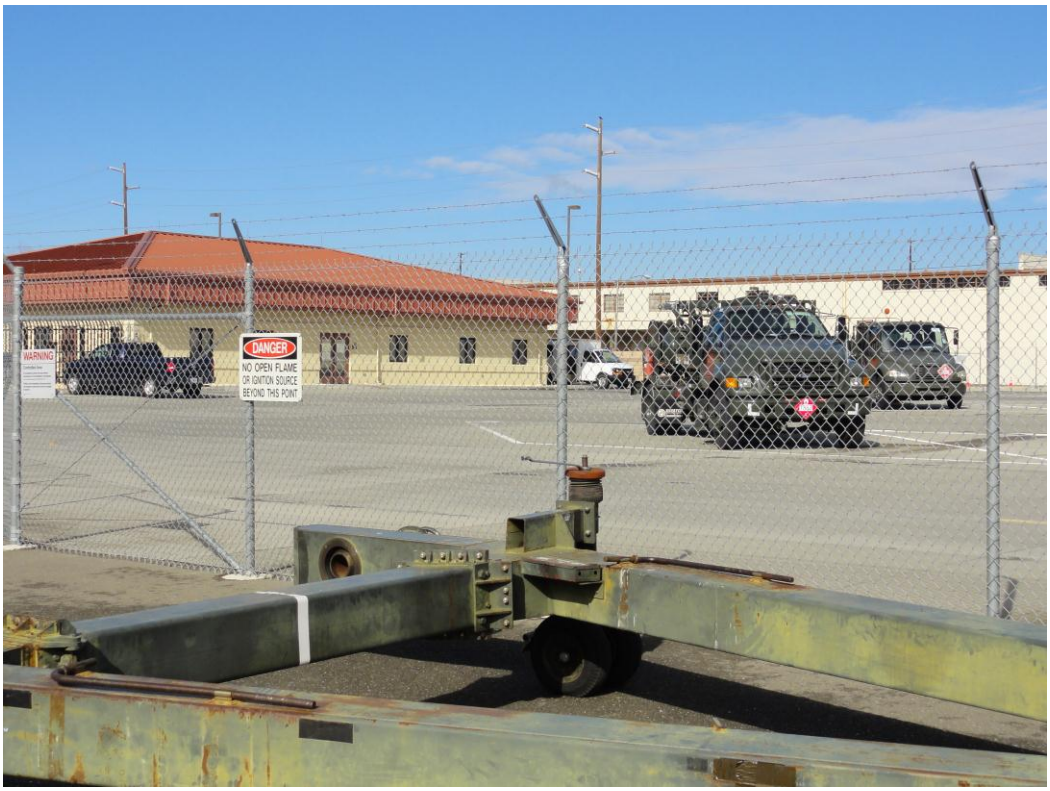
URS Corporation, 2004. *Summary of Remedial Investigation Data and Risk Management Decisions for Human Health at NEWIOU Soil Sites*. Environmental Restoration Program. Travis Air Force Base, California. October.

URS Corporation, 2005. Final *North/East/West Industrial Operable Unit Ecological Technical Memorandum*. Environmental Restoration Program. Travis Air Force Base, California. September.

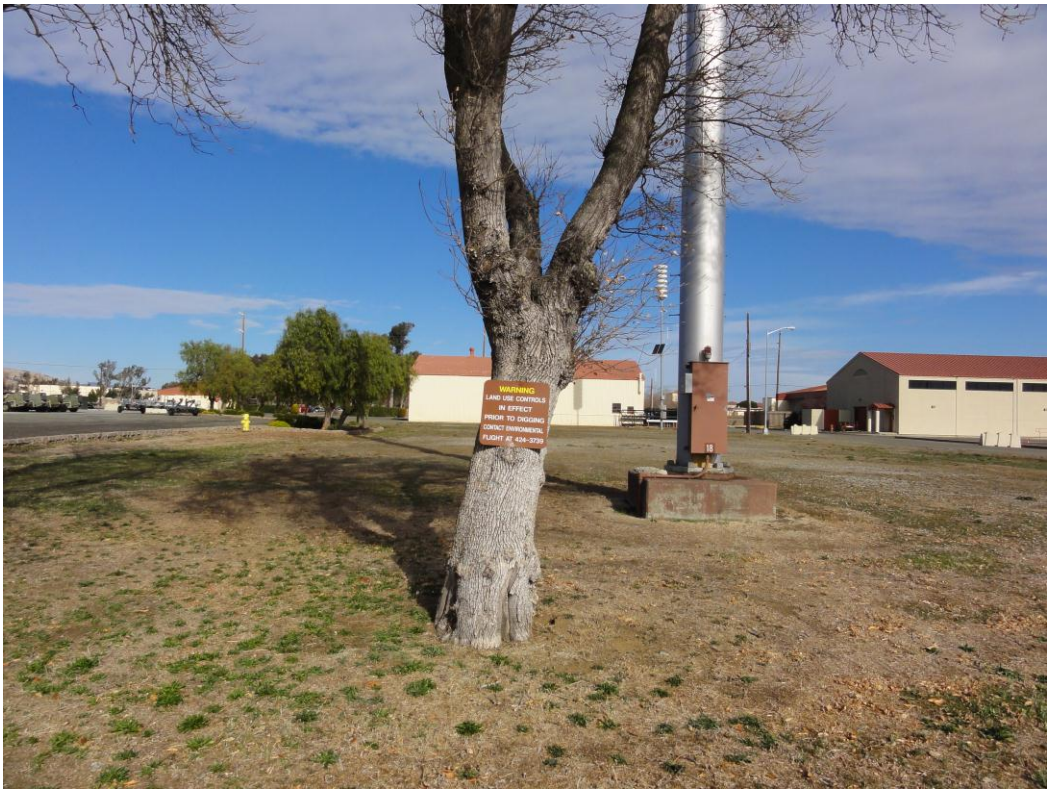
URS Corporation, 2006. Final *North/East/West Industrial Operable Unit Soil, Sediment, and Surface Water Record of Decision*. Environmental Restoration Program. Travis Air Force Base, California. May.

Appendix A

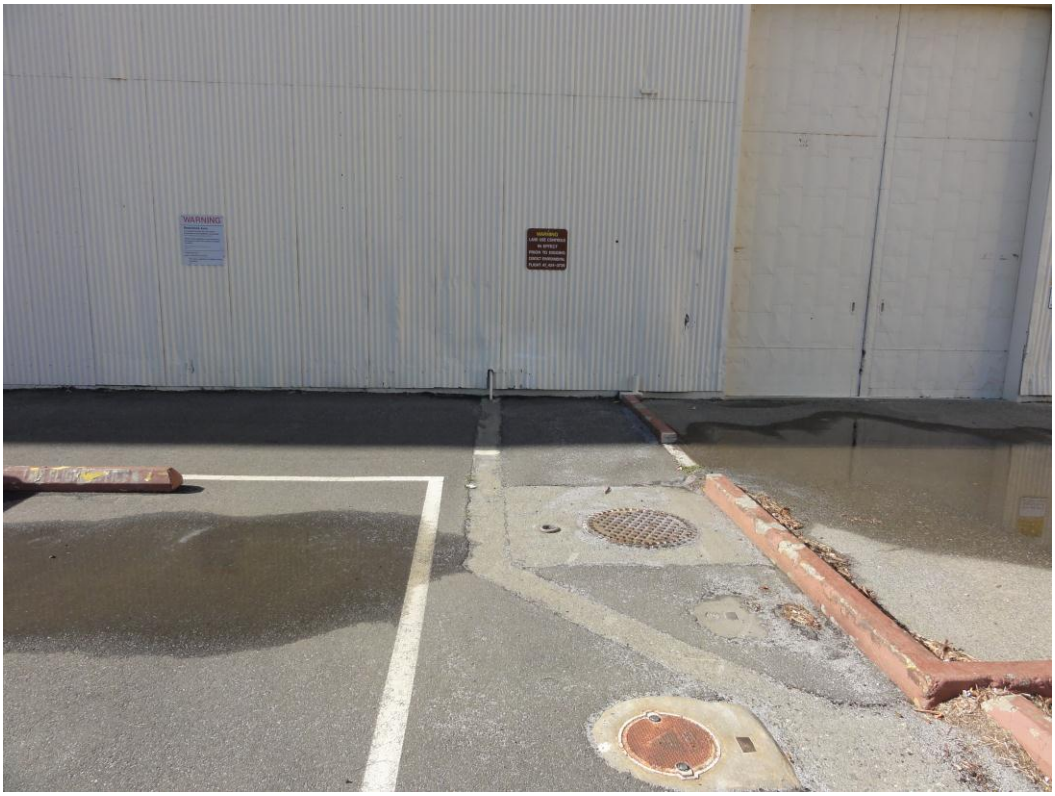
Photographs



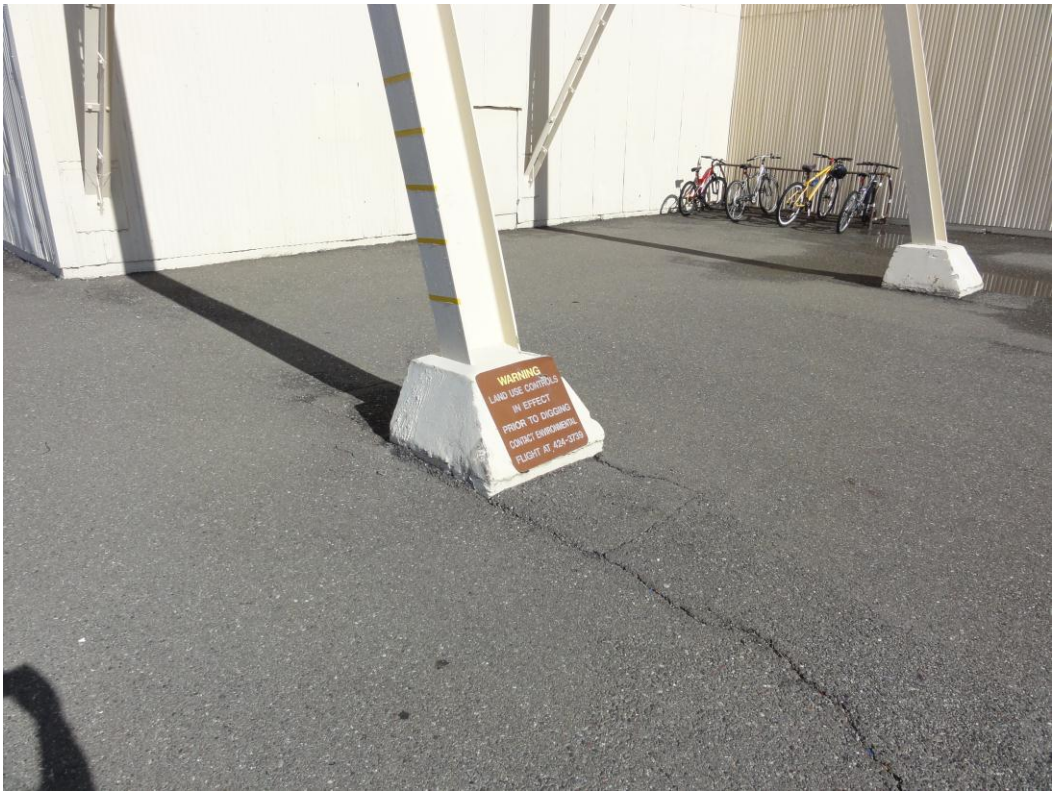
Photograph 1: Controlled Area at SS015



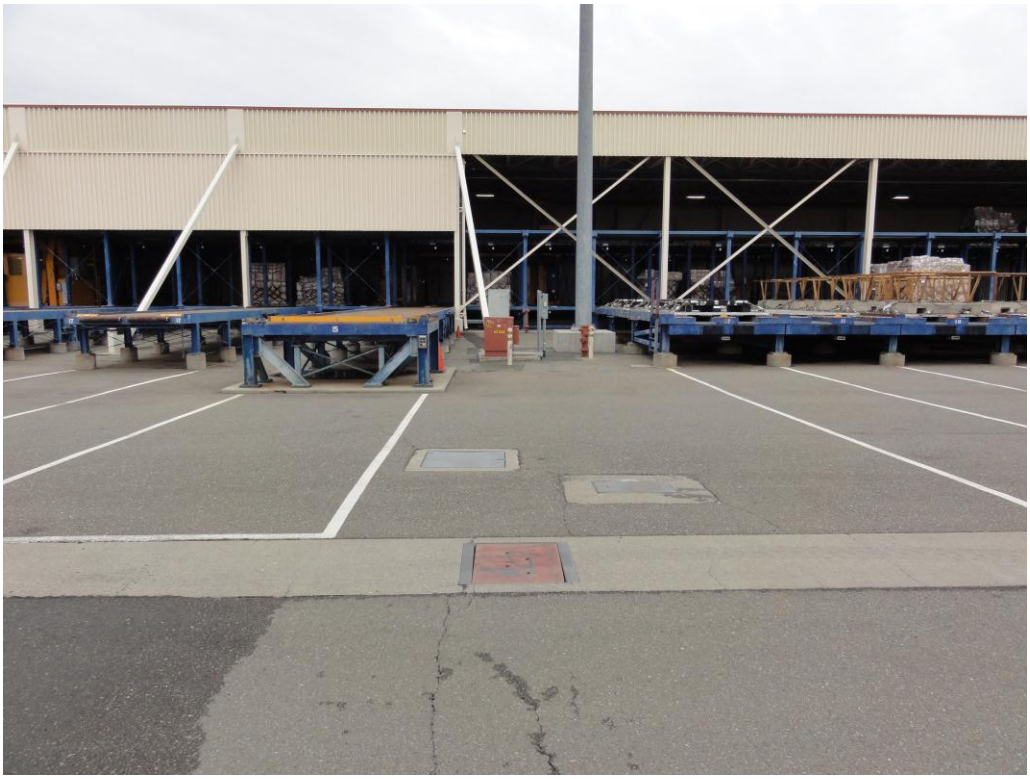
Photograph 2: Controlled Area at SS016



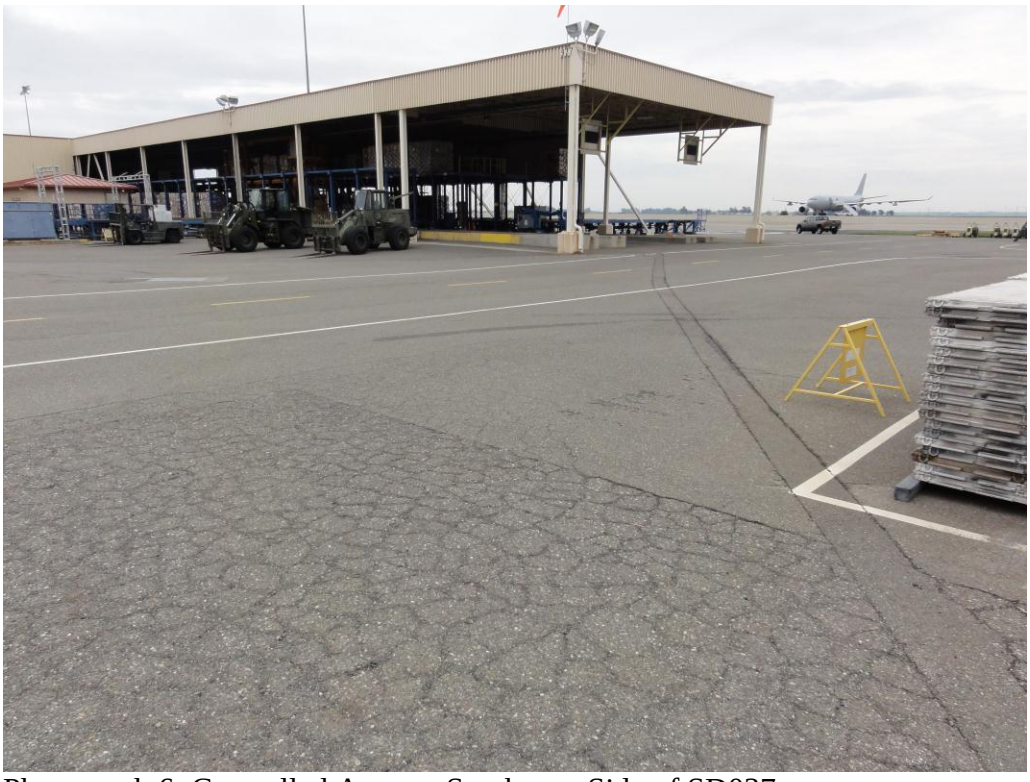
Photograph 3: Warning Sign at Controlled Area on East Side of SD033



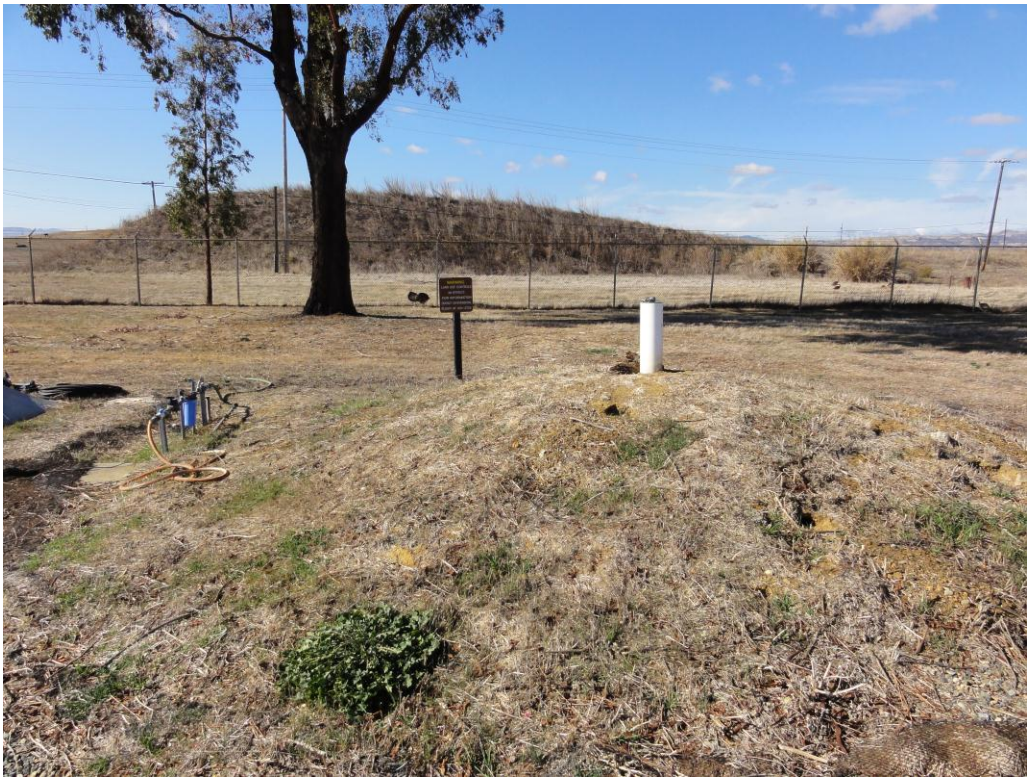
Photograph 4: Warning Sign at Controlled Area on West Side of SD033



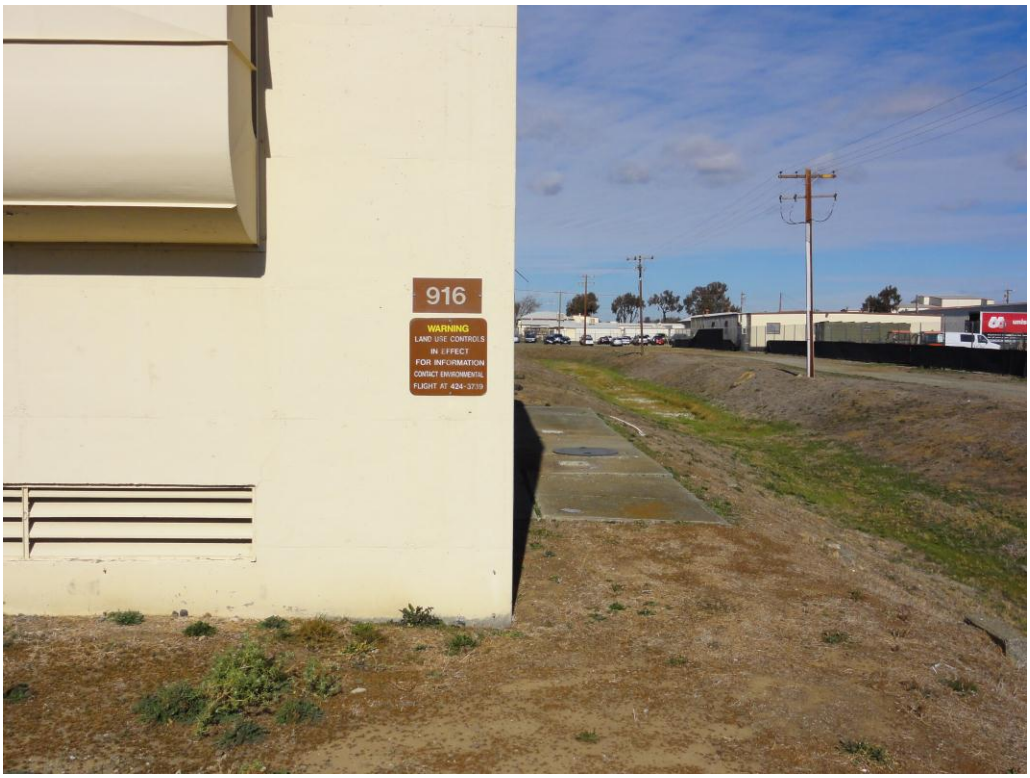
Photograph 5: Controlled Area on Southeast Side of SD037



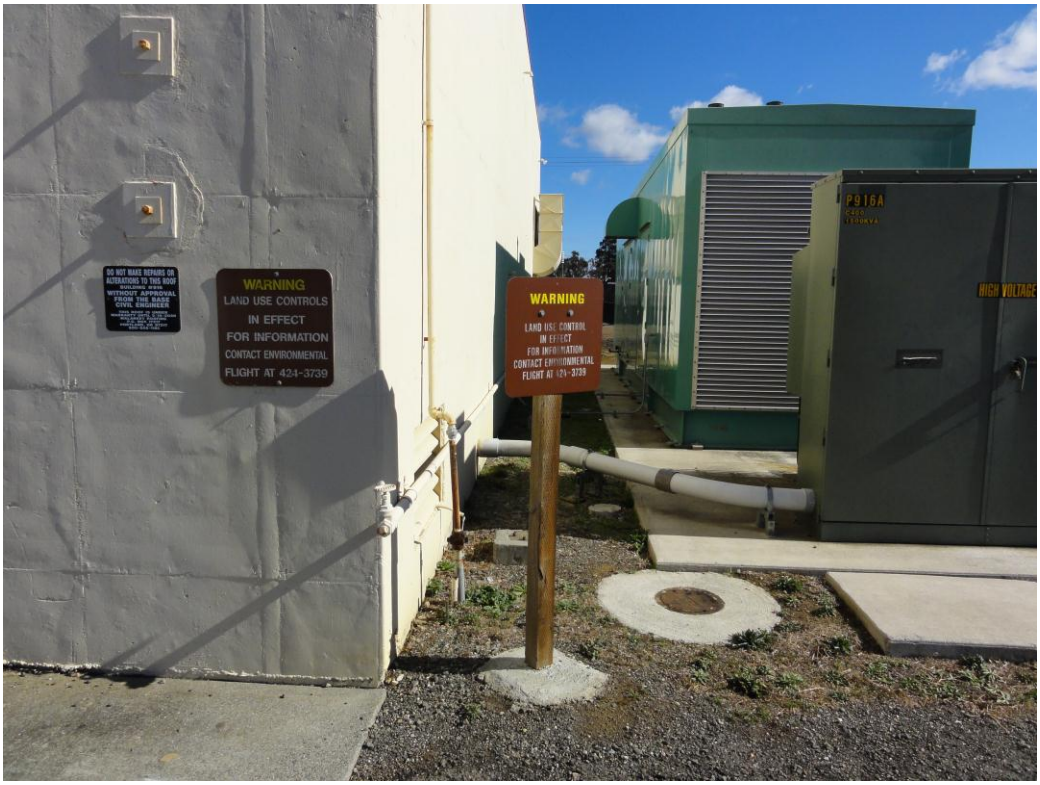
Photograph 6: Controlled Area on Southwest Side of SD037



Photograph 7: Controlled Area at DP039 (Post Bioreactor Construction)

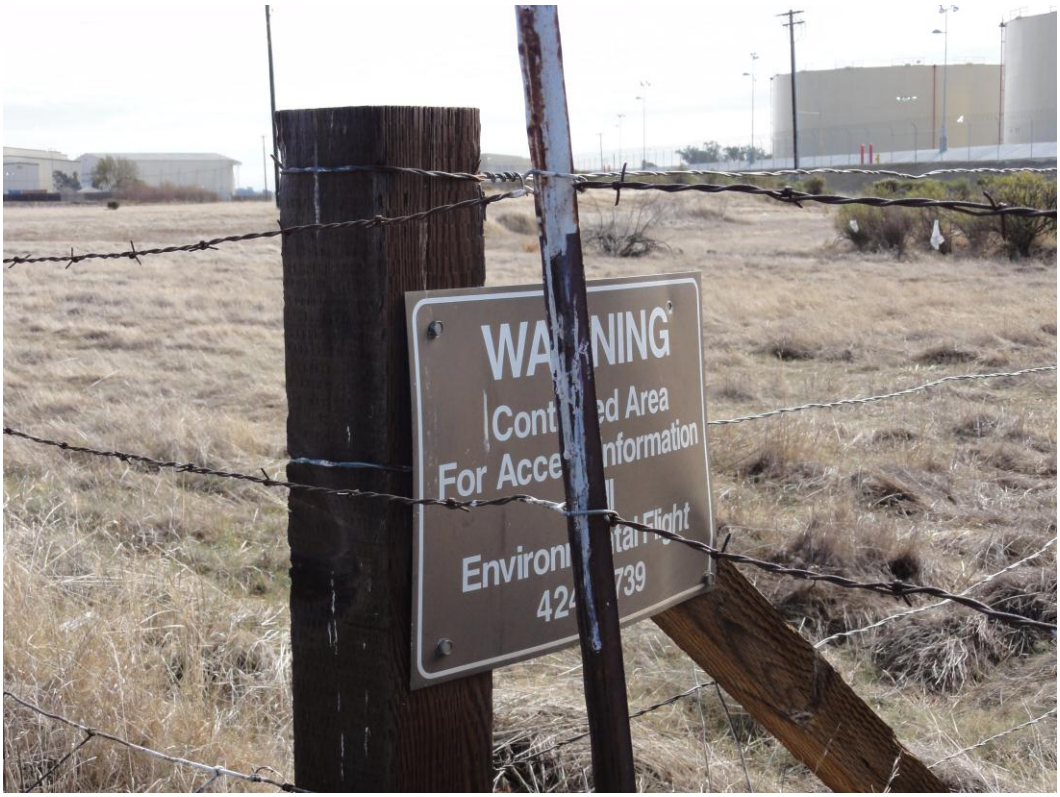


Photograph 8: Warning Sign near East Side of Installed Generator at SD043



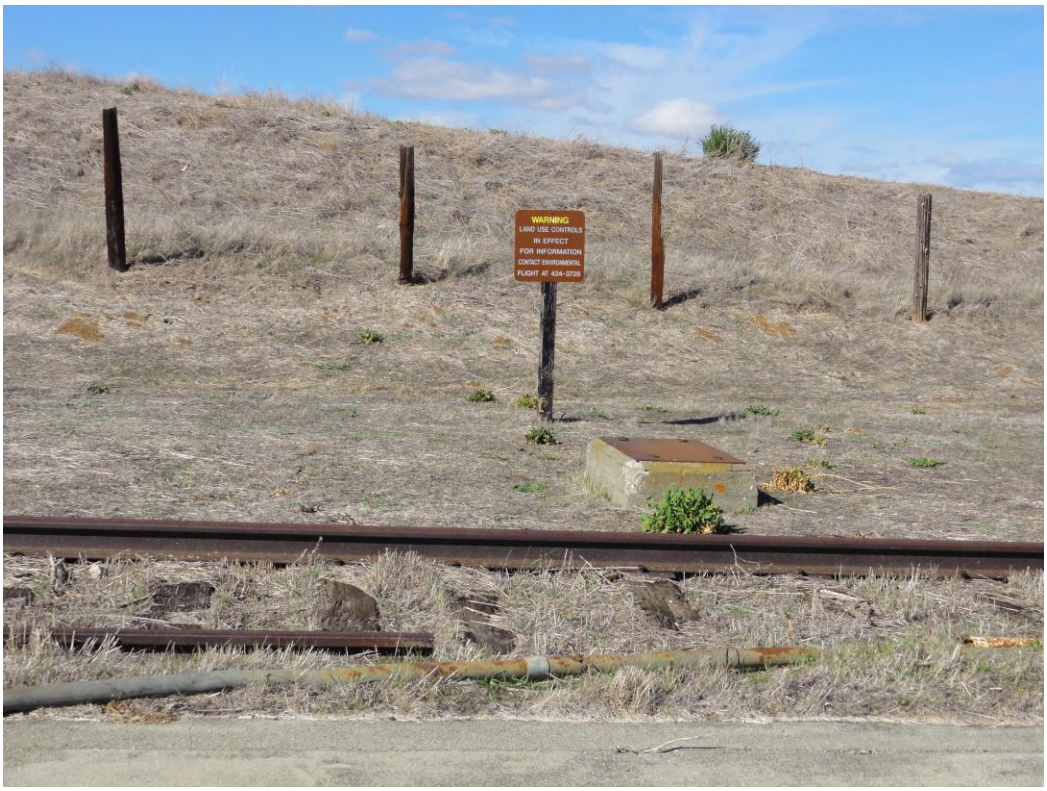
Photograph 9: Generator Pad and Warning Signs at SD043. Stanchion of Former Pad with Leaking Transformers is visible just behind the warning sign post.


Photograph 10: Area between Berm and new AST Containment Enclosure



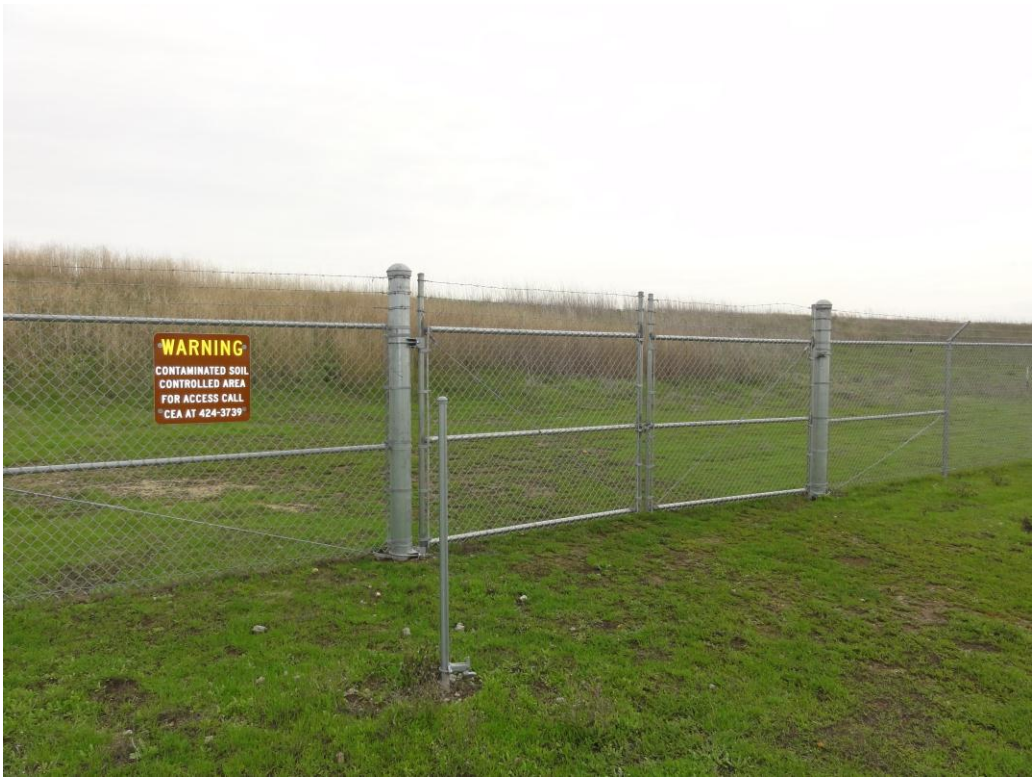
Photograph 11: North Side of LF044 Fence


Photograph 12: Gate and Warning Sign on South Side of LF044

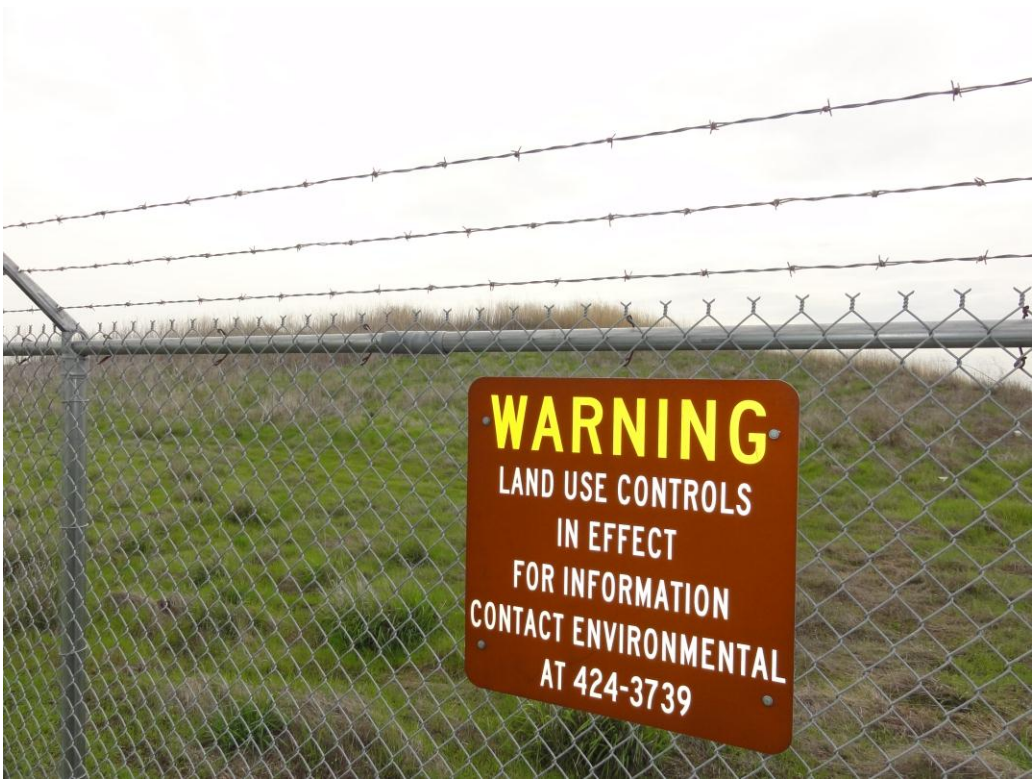


Photograph 13: Warning Sign at East Side of SS046

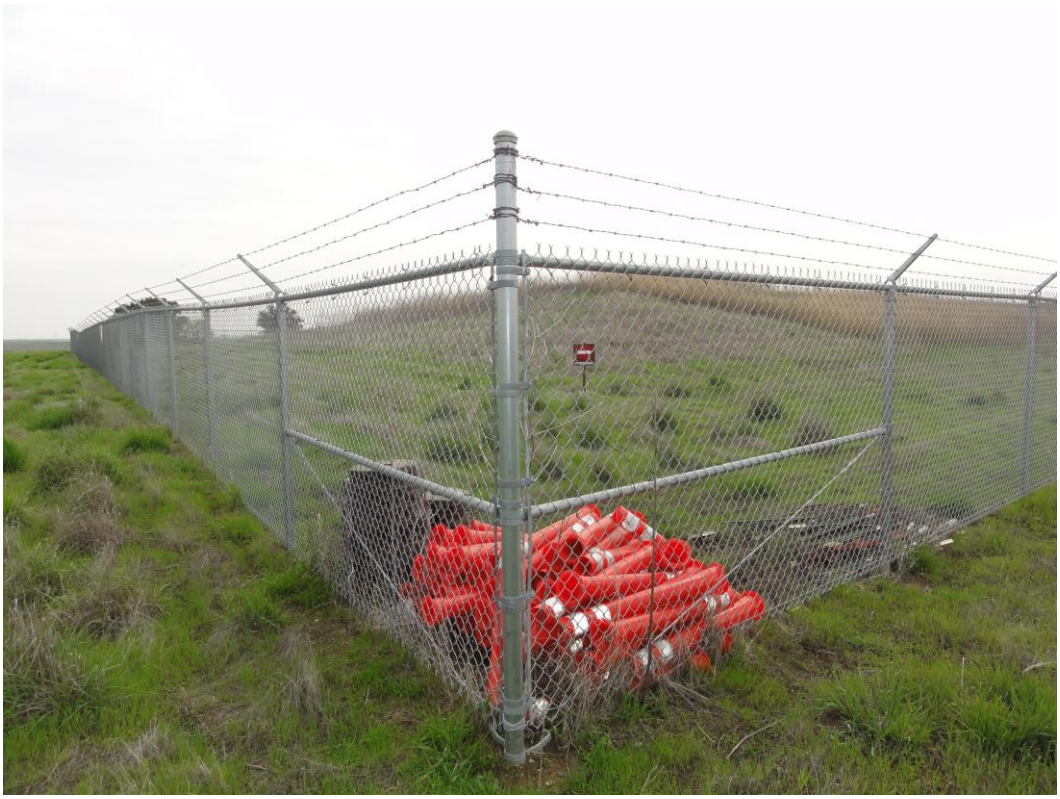
Photograph 14: Warning Sign at West Side of SS046



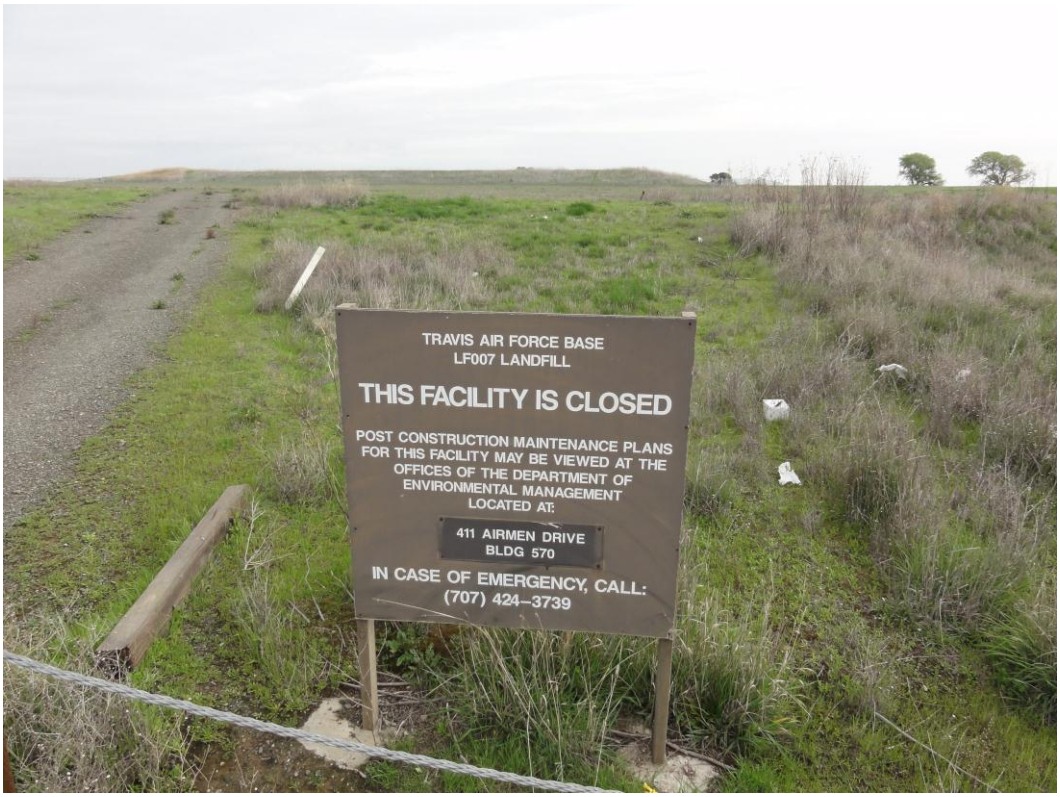
Photograph 15: Northwest CAMU Gate after Lysimeter Removal



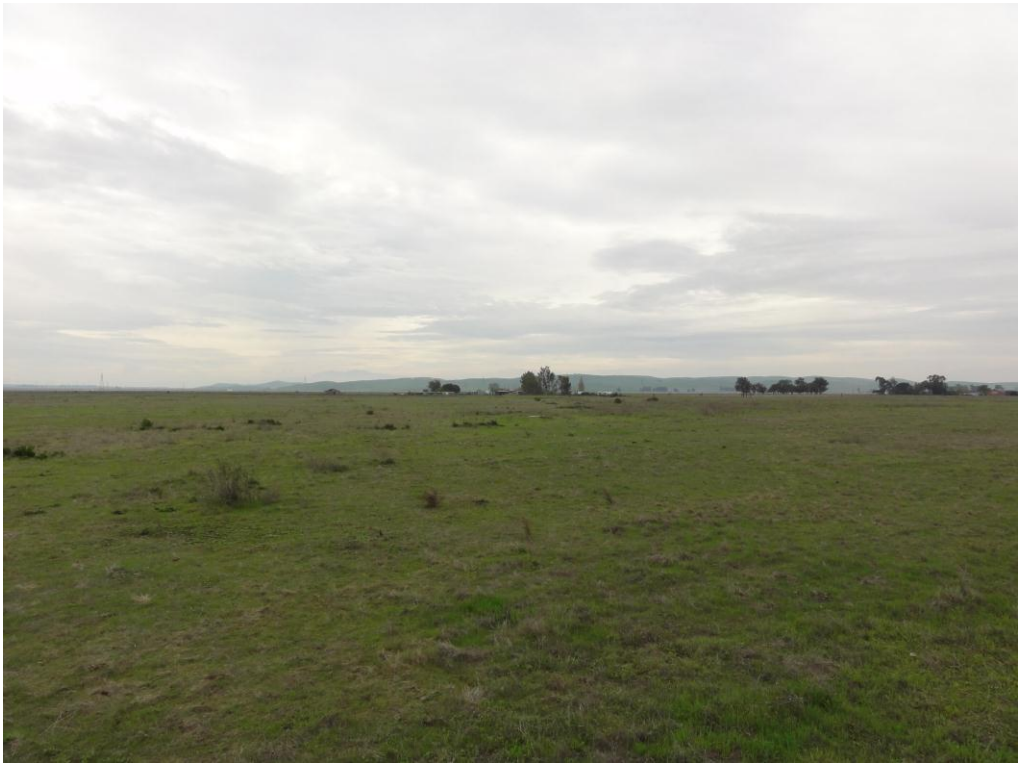
Photograph 16: Warning Sign on Northwest CAMU Fence



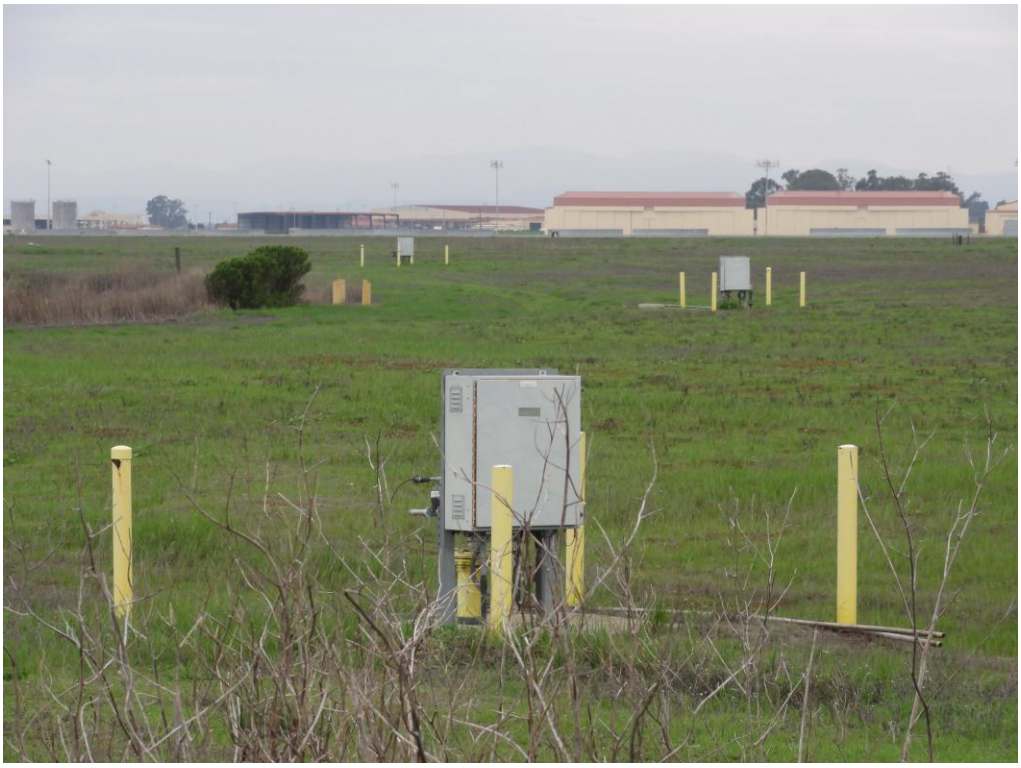
Photograph 17: Northwestern Corner of CAMU Fence.



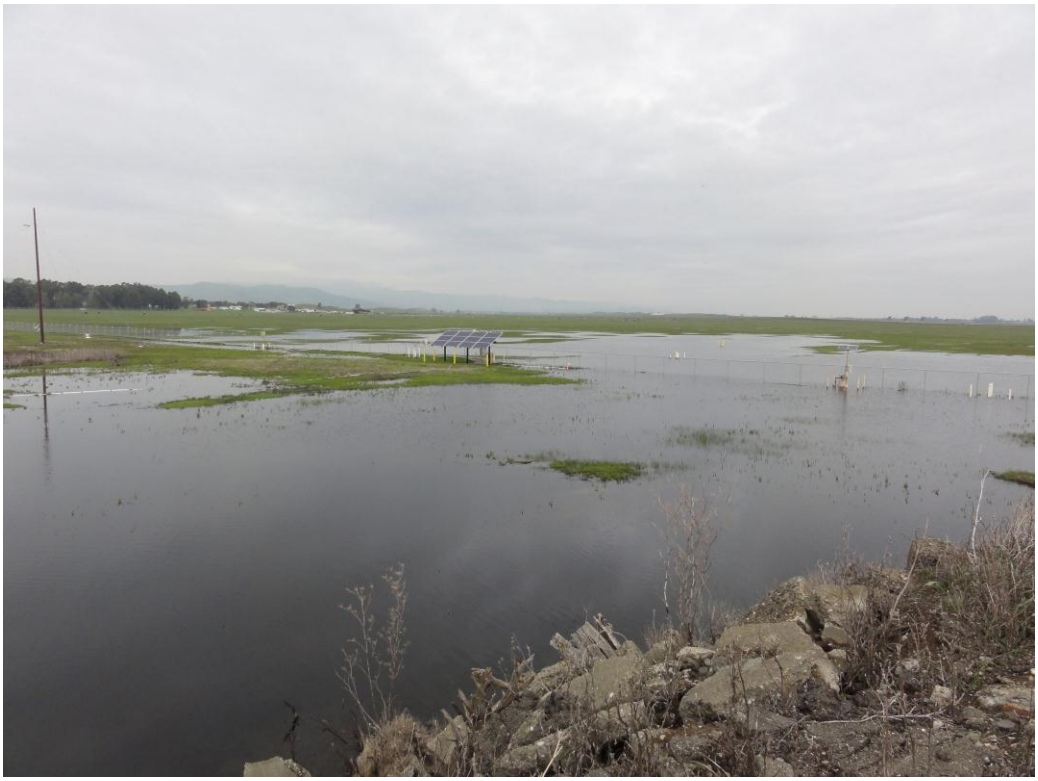
Photograph 18: Warning Sign at LF007 Entrance



Photograph 19: View of SS030 Easement from South Groundwater Treatment Plant



Photograph 20: View of SS029 Extraction Wells



Photograph 21: View of LF007C Extraction Well Network in Vernal Pool

Appendix B

Memorandum on Institutional Land Use Controls at Travis AFB Groundwater Sites

DEPARTMENT OF THE AIR FORCE
60TH CIVIL ENGINEER SQUADRON (AMC)

21 October 2008

MEMORANDUM FOR RECORD

FROM: 60 CES/CEAO
411 Airmen Drive
Travis AFB CA 94535-2001

SUBJECT: Institutional Land Use Controls at Travis Air Force Base Groundwater Sites

1. This memorandum documents the land use controls for all Travis AFB groundwater sites that are described in the final Groundwater IROD for the NEWIOU (Travis AFB, 1998) and the final Groundwater IROD for the WABOU (Travis AFB, 1999). The current land use controls are detailed in the base General Plan. Additional land use controls will be incorporated into the base General Plan to restrict on base development of water supply wells and consumption of contaminated groundwater. Regarding enforcement of land use controls at the off-base plumes, Travis AFB purchased long-term easements that grant access rights to the United States, its representatives, agents, and contractors for the purpose of conducting an environment response on the properties. The easements restrict the landowners from interfering or abridging the exercise of the government's rights under the easements. Actions such as residential development and any well drilling on the properties covered by the easements would interfere with the government's easements and appropriate action to prevent such interference would be taken. Actions to extend those easements will also be taken as necessary. Further, Solano County Ordinance, Chapter 13.10, makes it a misdemeanor to construct a well without a Solano County permit and requires the permit requester to notify the County of all wells within a 100 foot radius of the proposed well site. Given the number of monitoring and extraction wells the government is operating on the easements, this ordinance insures Travis AFB will be notified of a landowner's well drilling plans.

2. Consistent with the land use controls in the NEWIOU SSSW ROD, whenever the Air Force transfers real property that is subject to land use controls and resource use restrictions to another federal agency, the transfer documents shall require that the federal transferee include the land use controls and applicable resource use restrictions in its resource use plan or equivalent resource use mechanism. The Air Force shall advise the recipient federal agency of all controls and restrictions, including an obligation to execute and record a land use covenant in accordance with 22 CCR Section 67391.1 in the event the federal agency transfers the property to a non-federal entity. Whenever the Air Force proposes to transfer real property subject to resource use restrictions and institutional controls to a non-federal entity, it will provide information to that entity in the draft deed and transfer documents regarding necessary resource use restrictions and land use controls, including the obligation that a State Land Use Covenant will be executed and recorded, pursuant to 22 CCR Section 67391.1. The signed deed will include land use controls and resource restrictions equivalent to those contained in the State Land Use Covenant and

actually in place at the time of transfer. The Air Force will provide notice to the U.S. EPA and the State at least 6 months prior to any transfer or sale of the site at issue so that the U.S. EPA and the State can be involved in any discussions to ensure that appropriate provisions are included in the transfer terms or conveyance documents to maintain effective land use controls. If it is not possible for the facility to notify the U.S. EPA and the State at least 6 months prior to any transfer or sale, then the facility will notify the U.S. EPA and the State as soon as possible, but no later than 60 days prior to the transfer or sale of any property subject to land use controls. In addition to the land transfer notice, the Air Force agrees to provide the U.S. EPA and State with similar notice, within the same time frames, as to federal to federal transfer of property. The Air Force shall provide a copy of the executed deed or transfer assembly to the U.S. EPA and the State.

3. To the extent not already included, these restrictions will be incorporated into the appropriate planning documents. In addition, this letter will be placed in the administrative record files as a minor change to the WABOU and NEWIOU Groundwater Interim Records of Decision.

MARK H. SMITH
Chief, Asset Optimization

cc:
James Chang, EPA
Jose Salcedo, DTSC
Alan Friedman, RWQCB
Travis AFB ERP Administrative Record