

EXHIBIT E

ENVIRONMENTAL BASELINE SURVEY (EBS)



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Davis-Monthan Air Force Base, Arizona

Phase I Environmental Baseline Survey:

5-Year Lease Renewal Missile Site 8 Titan Missile Museum

Davis-Monthan Air Force Base, AZ

10 November 2015

**Phase I Environmental Baseline Survey (EBS)
5-Year Lease Renewal Missile Site 8 Titan Missile Museum
Davis-Monthan Air Force Base, AZ**

**355th Civil Engineer Squadron
Davis-Monthan AFB 85707
November 10, 2015**

Prepared in accordance with Department of the Air Force Instruction 32-7066, *Environmental Baseline Surveys in Real Property Transactions*, Dated January 26, 2015, which implements Air Force Policy Directive 32-70, Environmental Quality

Executive Summary

The U.S. Air Force (USAF) and Pima County propose a cooperative effort to continue use of lands legally described below. Pima County currently has a Lease with the U.S. Air Force (USAF) for the Titan Missile Museum, Missile Site 8, located in Green Valley, Arizona. Pima County in-turn leases this Site to the Titan Missile Museum to develop, operate, improve, and maintain with Air Force approval, as a missile museum. Present responsibility of Davis-Monthan is to accomplish annual compliance inspections, review, and approve additions, renovations, and alterations to the site. The term is set to expire 31 March 2016.

E.1 Property Identification

The location of the property is in Green Valley, Arizona with a street address of 1580 W. Duval Mine Road, Green Valley AZ. The listed boundary includes the entire 3.3 acres of the original 571-7 site enclosed by the security fence. A full legal description is in section 1.2., while a map in Appendix B shows the location of the property.

E.2 Site History and Operations

This lease is for an area which has been covered by a prior lease for the same purpose. The Titan II Missile Site 571-7 is the only surviving Titan II Intercontinental Ballistic Missile (ICBM) complex of the 54 that were “on alert” throughout the Cold War. Built in response to the “missile gap” panic of the 1960s, this sole survivor of the blockbuster delivery system is a unique window into the design and construction of a weapon system built to survive a nearby nuclear attack and then be available for retaliation if so ordered. The Titan II Missile Museum is listed as a National Historic Landmark.

E.3 Proposed Future Use

Pima County currently has a Lease with the U.S. Air Force (USAF) for the Titan Missile Museum, Missile Site 8, located in Green Valley, Arizona. Pima County in-turn leases this Site to the Titan Missile Museum to develop, operate, improve, and maintain with Air Force approval, as a missile museum.

E.4 Factors Evaluated

The Phase I EBS investigation was conducted in accordance with Department of the Air Force Instruction (AFI) 32-7066, Environmental Baseline Surveys in Real Property Transactions, dated January 26, 2015, which implements Air Force Policy Directive 32-70, Environmental Quality. Procedures documented in the AFI Chapter 2 (Conducting Phase I of the EBS) were followed during records searches, literature reviews, interviews, site visits, and formulation of conclusions.

Reasonably obtainable documents were reviewed, a visual site inspection was completed, records were requested and reviewed, and interviews were conducted with individuals familiar with the current use and past history of the site. Areas evaluated include the following available records and a visual site inspection; land use records, natural resources, cultural resources, contamination.

E.5 Property Categorization

All of the subject property is designated Category 1: An area of real property where no storage, release, or disposal of hazardous substances or petroleum products or their derivatives has occurred into the

environment or structures or disposed on the subject property (including no migration of these substances from adjacent properties). IAW AFI 32-7066, Para 3.5.1.1.

E.6 Findings and Recommendations

No contamination present, no impact to Natural or Cultural Resources, recommend granting 5 year lease.

1.0 PURPOSE OF THE ENVIRONMENTAL BASELINE SURVEY

The purpose of this survey is to determine and state the condition of real property controlled by Davis-Monthan AFB to be issued as a lease to Pima County, Arizona. This report documents the nature, magnitude, and extent of any environmental contamination of property considered for this outgrant. All potential environmental contamination liabilities associated with the subject real property transaction are discussed. The research team that prepared this report has assembled and analyzed sufficient information to assess the health and safety risks and determine that the proposed action will ensure adequate protection of human health and the environmental related to the subject real property action.

1.1 Boundaries of the Property and Survey Area

The Titan Missile Site Number 571-7 is that portion of the Southeast one-quarter of Section 34, Township 16 South, Range 13 East, Gila and Salt River Meridian, Pima County, Arizona. The listed boundary includes the entire 3.3 acres of the original 571-7 site enclosed by the security fence. See detailed legal description at Appendix F.

1.2 Legal Description

Tract Number S-8-100

All that tract or parcel of land, lying and being that portion of the Southeast one-quarter of Section 34, Township 17 South, Range 13 East, Gila and Salt River Meridian, in the County of Pima, State of Arizona, described as follows, basis of bearings being Transverse Mercator Grid, Central Zone, Arizona:

Commencing at the Southeast corner of said section; thence North 33 55' 50" West 1910.16 feet to the POINT OF BEGINNING; thence south of 600.00 feet; thence East 60.00 feet; thence South 300.00 feet; thence West 250.00 feet; thence North 300.00 feet; thence West 410.00 feet; thence North 600.00 feet; thence East 600.00 feet to the POINT OF BEGINNING.

Containing 9.99 acres, more or less.

Together with all improvements thereon and appurtenances thereunto belonging, including the rights and obligations under a perpetual and assignable easement and right of way to operate, maintain, and repair an access road and overhead and/or underground utility lines in, upon, over and across Tract Number S-8-100-E-1, as more fully described below on this exhibit, together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions, and any other vegetation, structures, or obstacles within the limits of the right of way; reserving, however, to the landowners, their heirs, executors, administrators, successors and assigns, the right to cross over said tract, including the movement of machinery, equipment and livestock, to their adjoining land; the above estate is taken subject, however to existing easements for public roads and highways, public utilities, railroads and pipelines.

Tract Number S-8-100-E-1

That portion of the Southeast one-quarter of Section 34, Township 17 South, Range 13 East, Gila and Salt River Meridian, in the County of Pima, State of Arizona within a strip of land, 150.00 feet wide, lying 75.00 feet on each side of the following described center line, basis of bearings being Transverse Mercator Grid, Central Zone, Arizona:

Commencing at the Southeast corner of said section, thence North 33 55' 50'' West 1910.16 feet; thence South 600.00 feet; thence West 240.00 feet to the TRUE POINT OF BEGINNING; thence South 409.85 feet to the beginning of a tangent curve concave Northeasterly and having a radius of 200.00 feet; thence Southeasterly along said curve through a central angle of 75 30' 0'', a distance of 263.54 feet thence South 75 30' 00'' East 636.98 feet to the beginning of a tangent curve concave Southwesterly and having a radius of 225.00 feet; thence Southeasterly along said curve through a central angle of 63 33' 56'', a distance of 249.62 feet; thence South 11 56' 04'' East 18.56 feet to the POINT OF ENDING in the center line of the 150.00 foot wide right of way of a County Road, known as Duval Mine Road, said point being in a curve in the center line of said Duval Mine Road, concave Southeasterly and having a central angle of 38 44' 36'', a radius of 1909.86 feet and an arc length of 1291.44 feet, a radial line of said curve to said point bears North 11 56' 04'' West.

EXCEPTING from said strip of land that portion lying within said County Road right of way.

ALSO EXCEPTING from said strip of land East 25 feet of the most Northerly 300 feet thereof.

Containing 5.00 acres, more or less, all of which is within Tract Number S-8-100-E-11.

2.0 SURVEY METHODOLOGY

2.1 Approach and Rationale

The Phase I EBS investigation was conducted in accordance with Department of the Air Force Instruction (AFI) 32-7066, *Environmental Baseline Surveys in Real Property Transactions*, dated January 26, 2015, which implements Air Force Policy Directive 32-70, *Environmental Quality*. Procedures documented in the AFI Chapter 2 (*Conducting Phase I of the EBS*) were followed during records searches, literature reviews, interviews, site visits, and formulation of conclusions.

Reasonably obtainable documents were reviewed, a visual site inspection was completed, records were requested, and interviews were conducted with individuals familiar with the current use and past history of the site.

2.2 Description of Documents Reviewed

The Arizona State Land Parcel Viewer (sco.az.gov/website/parcels/viewer.htm) was used to review current ownership information, in addition to any grazing allotments, mineral leases, or recent sales recorded against the property or properties in the vicinity.

Federal and state databases were accessed to search for any history of hazardous waste storage, use, treatment, or disposal, and similar records for landfills and other regulated substances such as petroleum compounds and polychlorinated biphenyls (PCBs) (EDR 2009c). The database search met the requirements of the *Standard Practice for Environmental Site Assessments*, E 1527-05, published by the American Society for Testing and Materials.

The Websites and data bases searched include:

ADEQ Hazardous Material Incident Logbook (Covers up to 15 Nov 2001) Website
(<http://www.azdeq.gov/databases/hwssearch.html>)

USCG National Response Home Page (Covers 1990-2014) Website (<http://www.nrc.uscg.mil/>)

ADEQ Air Quality Program eMap (<http://gisweb.azdeq.gov/arcgis/emaps/>)

ADEQ Hydrography eMap (<http://gisweb.azdeq.gov/arcgis/emaps/>)

ADEQ Waste Program eMap (<http://gisweb.azdeq.gov/arcgis/emaps/>)

ADEQ Water Quality eMap (<http://gisweb.azdeq.gov/arcgis/emaps/>)

EPA Region 9 Superfund Website (<http://www3.epa.gov/region09/superfund/superfundsites.html>)

USGS EarthExplorer Website (<http://earthexplorer.usgs.gov/>)

Department of the Interior – BLM – Public Land Survey System (PLSS) Data Base
(http://www.geocommunicator.gov/GeoComm/lis_home/home/)

Arizona State Land Department (ASLD) Parcels Viewer Website (<http://gis.azland.gov/webapps/parcel/>)

Google Earth (earth.google.com) (Cannot access on Government Computer)

USDA Natural Resources Conservation Service Arizona Website (Soil Map)
(<http://websoilsurvey.nrcs.usda.gov/app/>)

DMAFB Asbestos, LBP, and Mold Toxic Registry Database (X:\HOME\CEA\CEIE (previously CEAN)\2-Air Program Working Docs\Asbestos & LBP & Mold\Toxics Registry)

US Topo (<http://nationalmap.gov/ustopo/index.html>)

The County Recorder (sites outside of Pima County)
<http://www.thecountyrecorder.com/default.aspx?jsEnabled=1>

City of Tucson Department of Environmental Services (<https://www.tucsonaz.gov/environmental-services>)

Pima County Environmental Quality (http://webcms.pima.gov/government/environmental_quality/)

HabiMap Arizona (<http://habimap.org/>)

Pima County Assessor's Office (Sites in Pima County)
(http://www.asr.pima.gov/links/frn_AdvancedSearch_v2.aspx)

AZGF Online Environmental Review Tool (<http://www.azgfd.gov/hgis/>)

Wind Rose Data (<http://www.wcc.nrcs.usda.gov/climate/windrose.html>)

2.3 Property Inspections/Personal Interviews

The objective of the Visual Site Inspection (VSI) was to identify any visual or olfactory evidence of environmental conditions in connection with the subject property or adjoining properties to the extent not obstructed by geography, terrain or other obstacles.

355 CES/CEIE staff completed a VSI for this EBS on 16 October 2015, and did not observe environmental contamination of the property (currently the subject of the award and lease renewal). A topographical map of the subject property is included as Figure 1 of Appendix B. Selected site photographs are included in Appendix C of this report.

The following personnel were contacted regarding site history for the subject property:

Sheri McNamara, 355 CES, Realty Manager

Leah Proffitt, 355 CES, Air Program Manager

John Maisch, 355 CES, Water/Environmental Restoration Program Manager

Kevin Wakefield, 355 CES, Natural and Cultural Resources Program Manager

Jim Faas, Environmental Officer, Pima County

Yvonne Morris, Director Titan Missile Museum

Contact information for persons interviewed during data collection efforts is provided in Appendix E of this document.

2.4 Sampling

Sampling of environmental media was not incorporated into the scope of the project. If investigators had suspected that such environmental sampling was warranted, their course of action would have been to notify Davis-Monthan AFB environmental managers for the effort to be handled by others or under a separate task assignment.

3.0 FINDINGS FOR THE SUBJECT PROPERTY

3.1 History and Current Use

3.1.1 Historic Operations and Land Use

This license is for an area which has been covered by a prior permit for the same purpose. Titan II Missile Site 571-7 is the only surviving Titan II Intercontinental Ballistic Missile (ICBM) complex of the 54 that were “on alert” throughout the Cold War. Built in response to the “missile gap” panic of the 1960s, this sole survivor of the blockbuster delivery system is a unique window into the design and construction of a weapon system built to survive a nearby nuclear attack and then be available for retaliation if so ordered. Site No. 571-7 is now the home of the Titan Missile Museum which opened for business on 21 May 1986. It consists of the restored above- and below-ground equipment of Titan Missile Site Number 571-7 of the 571st Strategic Missile Squadron, 390th Strategic Missile Wing, headquartered at Davis-Monthan Air Force Base, Tucson, Arizona.

3.1.2 Demolitions

No demolitions have occurred on this property.

3.1.3 Current Operations and Land Use

The facility has been used since deactivation of the missile site as a museum. Visitors are taken on a tour of several levels within the missile silo system.

3.2 Environmental Setting

The property is located in the southern end of the Tucson Valley in an area known as the Santa Cruz Valley. The Tucson Mountains are to the North, with the Sierrita Mountains to the west, the Santa Rita to the East, and the Tumacacori Mountains to the South. The Santa Rita Experimental Range and Wildlife Area is to the east as well.

3.2.1 Climate

The Tucson Valley gets on average 11 inches of rain per year. The US average is 37. Snowfall is 1 inches. The average US city gets 25 inches of snow per year. The number of days with any measurable precipitation is 48. On average, there are 286 sunny days per year in Tucson, AZ. The July high is around 100 degrees. The January low is 38. Our comfort index, which is based on humidity during the hot months, is a 45 out of 100, where higher is more comfortable. The US average on the comfort index is 44. (Climate in Tucson, Arizona, 2014)

3.2.2 Soil

A Natural Resources Conservation Service (NRCS) Custom Soil Resources Report for the area was requested from the NRCS Website, and is included as Figure 2 in Appendix B. The report includes a map with legend of the area and a soil profile of the location. The landform of the area is classified as Hayhook sandy loam, 1 to 5 percent slopes. The Typical Soil Profile is A – 0 to 5 inches; sandy loam, Bw – 5 to 24 inches; sandy loam, C – 24 to 38 inches; gravelly sandy loam, 2C – 38 to 60 inches; gravelly loamy sand. (Soil Surveys, 2015)

3.2.3 Geology

The missile site stands on the west side of the town of Green Valley, Arizona. It is situated on the west side of the Santa Cruz River Valley. The valley is a structural feature filled with alluvium eroded from the surrounding mountains and deposited by ephemeral streams and wind. In general, the deposits consist mainly of Quaternary (Pleistocene and Holocene, less than 10 million years old), unconsolidated and semi-consolidated sediments with grain sizes ranging from clays to boulders of granite, granite gneiss, schist, andesite, basalt, rhyolite, sandstone, and limestone.

3.2.3 Hydrogeology

Groundwater. According to a 2007 report by Pima County, 76,000 acre feet (94,000,000 m³) of water was pumped from the aquifer in the Upper Santa Cruz Valley in 2006, with 85 percent of that water being used for mining and agriculture. The remaining 15 percent was split between water used for golf courses and residential/commercial water use. All major water users in the Upper Santa Cruz Valley pump water out of the same aquifer. None of these are owned by Pima County, the town of Sahuarita, or Green Valley. The major water users are all private companies: ASARCO-Mission Mine, Freeport-Mc Moran Sierrita Mine; Farmers Water Company; Sahuarita Water Company, Las Quintas Serenas Water Company, Quail Creek Water Company, Community Water Company of Green Valley, and the Green Valley Water District. The proliferation of water companies can be partially explained by the fact that, under Arizona water law, the water in the aquifer is ownerless, thus any amount of water can be pumped out, with costs limited only to drilling, pumping, distribution, etc.

Surface Water. Although perennial surface water is uncommon in central Arizona, ephemeral, intermittent, and effluent-dependent (including irrigation return flow) streams and standing water are common and essential components of surface water in desert washes. Desert washes primarily function as areas of overland flow collection and recharge for the surrounding watershed. Ephemeral pools, either in channel or in the uplands (i.e., tinajas), are essential as both watering sites for wildlife and stock, and to support amphibians and aquatic invertebrates. There are parts of four USGS subbasins in the planning area. Surface water flows within the IFNM are entirely ephemeral.

3.2.4 Topography

The Titan Missile Museum is in the south western portion of the Tucson Basin, a 1,000 square-mile broad desert valley. The Tucson Basin is a structural feature filled with alluvium eroded from the surrounding mountains and deposited by ephemeral streams and wind. In general, the deposits consist mainly of Quaternary (Pleistocene and Holocene, less than 10 million years old) unconsolidated and semi consolidated sediments with grain sizes ranging from clays to boulders of granite, granite gneiss, schist, andesite, basalt, rhyolite, sandstone, and limestone.

4.0 PROPERTY CATEGORIZATION

Future actions necessary to address the environmental condition of the property have not been identified as a result of this environmental baseline survey.

4.1 Facility Matrix

Building	Facility	Identified Conditions	Property Category Code
N/A	N/A	None identified	1*

*Category 1 properties are areas where no storage, release or disposal has occurred; and where no hazardous substances or petroleum products or their derivatives were stored, released into the environment or structures, or disposed on the subject property and where no migration from adjacent areas has occurred.

4.2 Property Categories Map (If More Than One Category)

All of the subject property is designated Category 1. Therefore, no property categories map was prepared.

4.3 Resources Map

Resource inventories are not required by AFI 32-7066, and were outside the scope of this investigation. No resource map was prepared.

4.4 Data Gaps

No data gaps were identified for the subject property.

5.0 FINDINGS FOR SUBJECT PROPERTY

5.1 Visual Site Inspection (VSI)

Visual site inspection (VSI) was conducted on 16 October 2015 using the Davis Monthan AFB Phase I Environmental Baseline Survey (EBS) Investigation Worksheet and the guidance provided in AFI 32-7066, Para 3.5.2.. During the site inspection, the Environmental Areas/Factors listed in the following paragraphs were assessed; site photos were taken and are included in Appendix C. While conducting the visual site inspection no issues were identified that would prevent the proposed project from being completed as planned.

5.2 Hazardous Substance Notifications

5.2.1 Storage of Hazardous Substances

Based on historical use of the subject property and visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current presence of storage of hazardous substances was suspected or observed.

5.2.2 Hazardous Substance Released

Based on historical use of the subject property and visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current or former presence of hazardous substance release was suspected or observed.

5.2.3 Hazardous and Petroleum Waste

Based on historical use of the subject property and visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current presence of hazardous materials storage and/or petroleum product storage was suspected or observed.

5.3 Petroleum Products and Derivatives

Based on historical use of the subject property and visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current presence of petroleum products or derivatives was suspected or observed, however it is assumed minor drips from personal operated vehicles (POVs) may occur and could runoff during storm events. Stormwater discharges are monitored and permitted in accordance with ADEQ's Water Quality Division.

5.4 Environmental Restoration

5.4.1 Environmental Restoration Program (ERP) Sites

Based on historical use of the subject property, a visual inspection of the site, and records available online from the Arizona Department of Environmental Quality (ADEQ), the Arizona State Land Department (ASLD), and DMAFB, there are no current or former presence of any (ERPs) sites within or adjacent to the proposed leased area.

5.4.2 Military Munitions Response Program (MMRP) Sites

Based on historical use of the subject property, a visual inspection of the site, and records available online from the Arizona Department of Environmental Quality (ADEQ), the Arizona State Land Department (ASLD), and DMAFB, there are no current or former Military Munitions Response Program (MMRP) Sites in the proposed leased area.

5.5 Areas of Concern (AOC)

Based on historical use of the subject property, a visual inspection of the site, and records available online from the Arizona Department of Environmental Quality (ADEQ), the Arizona State Land Department (ASLD), and DMAFB, there are no current or former presence Areas of Concern (AOC) in the proposed leased area.

5.6 Storage Tanks(s)

During the site visit and interviews conducted on 16 Oct 2015 it was determined that there are 4 underground and one above ground storage tanks on the property. All were drained and purged by the Air Force during the deactivation of the missile site.

5.6.1 Aboveground Storage Tanks

During the visual inspection one above ground storage tank was present. This tank is mounted on a trailer and is parked on one of the fuel transfer parking areas. The tank was cleaned and purged and is no longer used for the storage of fuel. The above ground tank is a static display which helps show how rocket fuel was transferred to the missile when it was operational.

5.6.2 Underground Storage Tanks

During the visual inspection of the site, four underground storage tanks were identified; all have been drained and purged by the Air Force as part of the deactivation of the missile site. On level 5 there is a 2,500 gallon diesel fuel storage tank, on level 3 there is a 55 gallon "day Tank" next to the generator, and an 8,000 gallon diesel fuel storage tank buried under the surface near the silo. During the site visit there were no smells of diesel fuel near any of these tanks. It is also noted that a 100,000 gallon water storage tank is located inside the silo; the water was used to cool the silo in case of launch.

5.6.3 Pipelines, Hydrant Fueling, and Transfer Systems

During the site visit on 16 Oct 2015 the presence of pipelines and transfer systems was observed. The one above ground storage tank mounted on a trailer was used to deliver fuel to the missile using a transfer system. The pipeline and transfer system was drained and purged during the deactivation of the missile site. There is no visual or aromatic presence of fuel in the system.

5.7 Oil Water Separators(s)

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current or former presence of oil/water separators was suspected or observed.

5.8 Grease Trap(s)

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current or former presence of grease traps was suspected or observed.

5.9 Wash Rack(s)

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current or former presence of a wash rack was suspected or observed.

5.10 Waste Tank(s)

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current or former presence of waste tanks was suspected or observed.

5.11 Pesticides

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), the presence of pesticides was not suspected or observed. Any pesticide usage or application would be IAW all local, state, and federal pesticide application laws and are contracted through TUSD.

5.12 Military Munitions/Ordnance

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current presence of ordnance was suspected or observed. The missile warhead was removed during the deactivation of the missile site.

5.13 Medical or Bio-Hazardous Waste

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current or former presence of medical or bio-hazardous waste was suspected or observed.

5.14 Radioactive Waste

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current or former presence of radioactive waste was suspected or observed on the proposed site.

5.15 Solid/Municipal Waste

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no solid waste was observed on-site, except for designated Municipal Waste Containers (i.e., dumpsters).

5.16 Indoor Air Quality

During the interview with the building custodian no indoor air quality issues were identified.

5.17 Groundwater

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no groundwater contamination was suspected.

5.18 Wastewater treatment, Collection and Disposal/Discharge

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current or former presence of wastewater treatment collection and discharge was identified or observed.

5.18.1 Storm Water

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current or former presence of storm water drains was suspected.

5.18.2 Septic Tanks and Leach Fields

During interview on 16 October 2015 it was discovered that the Titan Missile site uses a septic tank and leach field system. They have had no issues with the system.

5.19. Drinking Water Quality

Drinking water for the site is provided by the Community Water Company of Green Valley. The water quality met or surpassed all primary federal and state standards for drinking water in 2014. A copy of the report can be found in Appendix B, Figure 8.

5.20 Utilities (Energy)

The Titan Missile Museum purchases its commercial power from Trico Cooperative; this is the same as the Air Force did when the site was operational. The power comes to the site via overhead lines to a transformer on the north side of the site. This transformer provides power to the missile silo, from the transformer the line goes underground to the Motor Control Panel where the power is stepped down from 480 volts to the required voltage needed. Power for the administrative building comes to the site via overhead lines to a transformer on the west side of the site and enters the building.

5.21 Asbestos

A check of the DMAFB Asbestos, LBP, and Mold Toxic Registry Database listed no known occurrences at the missile site. Pima County Department of Environmental Quality has conducted several tests of suspected materials on the site, the results all came back negative according to Mr. Jim Fass. Mr. Fass also stated that asbestos may be present in the gasket material used in the piping used within the complex; however none will be disturbed to complete testing.

5.22 Polychlorinated Biphenyls (PCBs)

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current or former presence of PCBs was suspected.

5.23 Radon

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ) and the Arizona State Land Department (ASLD), no current or former presence of radon was suspected.

5.24 Lead-Based Paint

Based on historical use of the subject property, a visual inspection of the site, and records available online from both the Arizona Department of Environmental Quality (ADEQ), the Arizona State Land Department (ASLD), and the DMAFB Asbestos, LBP, and Mold Toxic Registry Database, no current or former presence of lead-based paint was suspected.

5.25 Cultural Resources

5.25.1 Prehistoric Resources

Based on the review of Cultural Surveys available that include the proposed project area, there is no documented evidence of prehistoric resources on the proposed site.

5.25.2 Historic Structures and Resources

The Titan Missile Museum is a listed National Historic Landmark.

5.25.3 Paleontological Resources

Based on the review of Cultural Surveys available that include proposed project area, there is no documented evidence of paleontological resources on the proposed site.

5.26 Floodplains

There is no floodplain in the vicinity of the site. Water from the site flows to the North West.

5.27 Natural/Biological Resources

Vegetation. All of Southern Arizona as well as adjacent Mexico which is at relatively low elevation is in a vegetation habitat known as Sonoran Desert scrub. The Sonoran Desert, a large region with more than two-thirds lying in northwestern Mexico (Sonora, Baja California), contains several subdivisions. In addition to perennial vegetation, the Sonoran Desert also has annual species, sometimes referred to as “ephemerals” since they grow only after brief moist periods and are short-lived. The most common native vegetative association in the lower elevations in the region is the creosote bush-bursageis. Other communities interspersed within the larger community include cacti, shrubs, and small trees; specifically prickly pear, chollas, saguaro, barrel cactus, white mesquite, palo verde, acacia, and ironwood.

Wildlife. The creosote-bursage vegetative association supports a wide variety of animal life including such species as coyote, jackrabbit, cottontail rabbit, cactus wren, curved bill thrasher, Gambel’s quail, Inca dove, and numerous rodents. Common reptiles indigenous to the area include the regal horned lizard, eastern fence lizard, gopher snake, and western diamondback rattlesnake. The fact that much of the area is now covered by pavement, with much of the area cleared, has lessened the presence of wildlife, but some common mammals, birds, and reptiles are still present.

5.27.1 Sensitive Habitat

No sensitive habitats have been identified in the project area.

5.27.2 Threatened and Endangered Species

Although a large number of federally and state-listed threatened, endangered, and status review plant and animal species occur in the vicinity of Missile Site 8, no evidence has been found to indicate their presence on the site. (Status review species are those under study for possible listing).

5.27.3 Wetlands

There are no wetlands in this area.

5.27.4 Floodplains

The location of Missile Site 8 is not within any floodplain boundary.

6.0 APPLICABLE REGULATORY COMPLIANCE ISSUES

6.1 List of Compliance Issues

No compliance issues have been identified as a result of this survey

6.2 Description of Corrective Actions

No needed corrective actions were identified for the subject property.

6.3 Estimates of Various Alternatives

This section is not applicable to the current document.

7.0 FINDINGS FOR ADJACENT PROPERTIES

7.1 Introduction

Records requested from ADEQ, ASLD, and databases searched through the Arizona State Land Parcel Viewer were reviewed and encompassed either a one to four square mile area (or larger) surrounding the subject property to identify occurrences of storage and releases of hazardous materials, hazardous waste, and other regulated substances for nearby properties.

No documents or other evidence was identified in regards to the locations and types of hazardous materials, hazardous waste, or other regulated substances either on or in close proximity to the subject property.

7.2 Adjacent Environmental Data Resources (EDR) Survey Properties

Nearby land use surrounding the subject property includes mining operations to the north and west, and the town of Green Valley to the south and east. The museum site is surrounded by land owned by Freeport Mc Moran Sierrita Inc. See Appendix B, Figure 11, for the map from the Pima County Recorder's Office showing land ownership around the museum.

7.2.1 Federal Databases: Databases listed in Section 2.2 were reviewed; no findings of concern were identified.

7.2.2 State and Local Databases: Databases listed in Section 2.2 were reviewed; no findings of concern were identified.

7.2.3 Tribal Records: No tribal records were reviewed; no tribes have claimed a tie to the lands located at the missile site.

7.3 Findings/Impact

The adjacent properties were visually inspected on 16 October 2015. No findings of concern were observed or identified that would indicate presence of environmental contamination on or near the subject property. The database review did not identify any findings of concern as well. The project will result in minimal impact to the environment and recommend proceeding with granting the lease.

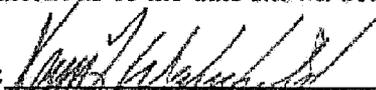
8.0 RECOMMENDATIONS

Based upon the results of the EBS, recommend that the planned lease of the subject property proceed as planned.

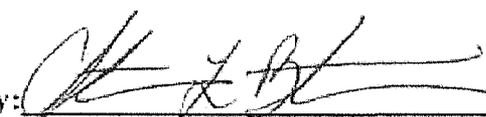
9.0 CERTIFICATIONS

Certification of the Environmental Baseline Survey

The 355 CES/CEIE has conducted this Environmental Baseline Survey on behalf of the Air Force. The preparer has reviewed all appropriate records made available, and conducted visual site inspections of the selected facilities following an analysis of information during the record search. The information contained within the survey report is based on records made available and, to the best of the preparer's knowledge, is correct and current as of the date shown below.

Certified by: 
KEVIN L. WAKEFIELD, GS-09, DAFC
EIAP Program Manager

Date: 10 NOV 2015

Approved by: 
CHRISTOPHER L. BREWSTER, GS-12, DAFC
Chief, Environmental

Date: 10 NOV 2015

The following specific certifications apply:

HAZARDOUS Substances:

Certification of No Contamination

UB This real property contains no known hazardous substance as that term is defined in the CERCLA (42 U.S.C. 9601), as amended, or other contamination as specified by the RCRA of 1976, the implementing Environmental Protection Agency regulation (40 CFR parts 261, 262, 263, and 761), and the federal Property Management regulations (41 CFR Part 101-47). A complete search of agency files revealed that no hazardous substances has been stored for more than one year, known to have been released, or disposed of on Air Force-controlled real property described in Section 1.2., Legal Description.

Certification of Contamination

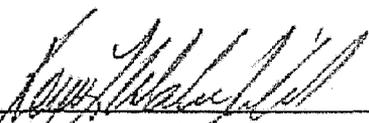
_____ A complete search of agency files has revealed that hazardous substance(s) as that term is defined in the CERCLA (42 U.S.C. 9601) as amended, were stored for one year or more, known to have been released, or were disposed of on the excess Air Force controlled real property described in Section 1.2., Legal Description.

Certification of PCB Clearance (Either 1 or 2):

1. This Real Property is in compliance with 40 CFR 761 as outlined below:
- a. An inventory has been prepared and is being maintained of all PCB Real Property installed Equipment and Real Property PCB Items per Section 761.45.
 - b. All in-service and stored serviceable PCB, PCB contaminated Real Property Installed Equipment and Real Property PCB Items have been inspected, repaired and are being maintained to prevent leakage, therefore can be distributed per Section 761.30.
 - c. PCB Real Property Installed Equipment and Real Property PCB Items have been stored, decontaminated, and labeled per Section 761.42, 761.43, and 761.44.
 - d. There is no known PCB contaminated soil, wastes, or unserviceable equipment remaining on the existing property.
- (CB) 2. A records search and an on-site inspection indicate that this property has not been exposed to PCB materials or equipment.

Certification of Other Contaminants: check all that apply and/or list any other known contaminants

- Lead Based Paint
 Asbestos Containing materials
 Other (please list any other contaminants)

Certified by: 
KEVIN L. WAKEFIELD, GS-09, DAFC
EIAP Program Manager

Date: 10 NOV 2015

Approved by: 
CHRISTOPHER L. BREWSTER, GS-12, DAFC
Chief, Environmental

Date: 10 Nov 2015

APPENDIX A

ABBREVIATIONS, ACRONYMS AND KEY TERMS

Abbreviations and Acronyms

AFB - Air Force Base

AFI - Air Force Instruction

AST - Above Ground Storage Tank

AZDEQ – Arizona Department of Environmental Quality

bgs - Below Ground Surface

BTEXN -Benzene Toluene Ethylbenzene Xylenes and Naphthalene

CAS - Chemical Abstract Service

CERCLA—Comprehensive Environmental Response, Compensation, and Liability Act

CFR - Code of Federal Regulations

DLA - Defense Logistics Agency

EBS - Environmental Baseline Survey

IRP - Installation Restoration Program

PCB - Polychlorinated Biphenyl

UST - Underground Storage Tank

VOC - Volatile Organic Compound

IRP - Installation Restoration Program

PCB - Polychlorinated biphenyl

Terms

Acquisition—Any authorized method of obtaining Air Force control of and responsibility for real property. An acquisition may be a temporary or permanent interest in real property. Includes interagency transfers of real property accountability from other Federal government agencies. Methods include purchase, condemnation, donation, exchange, leasing, licenses, permits, revestment and recapture.

Adjacent Properties—Not only those properties contiguous to the boundaries of the installation or subject property, but also those properties relatively nearby that could pose significant environmental impact or concern on the installation or subject property.

Disposal—Any authorized method of permanently divesting the Air Force of control of and responsibility for real property. Includes fee conveyance and interagency transfers or other disposition.

Hazardous Substance—In addition to the meaning provided in CERCLA, 42 U.S.C. 9601(14), this term shall specifically include petroleum, petroleum products, oil, and lubricants (POL).

Outgrant—A temporary grant of an interest in or right to use Air Force controlled real property by means of either a lease, license or permit.

Storage—The holding of hazardous substances for a temporary period prior to the hazardous substances being either used, treated, transported, or disposed of.

Temporary Interest—A grant of interest in or use of real property which expires at the end of a stated term or which can be terminated. Instruments include leases, licenses and permits.

Real Property—Land and fixtures and other improvements affixed thereto.

Release—This term shall have the meaning provided in CERCLA, 42 U.S.C. 9601(22).