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14. ABSTRACT

Hill Air Force Base (AFB) proposes to provide a new truck offload station to improve both efficiency and safety of fuel deliveries at the Hill AFB fuel tank farm. The findings of this EA indicate that the proposed action would not have significant adverse effects on the human environment or any of the environmental resources as described in the EA. Therefore, it is concluded that a Finding of No Significant Impact is justified.

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Environmental Assessment
Hill Air Force Base

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Hill Air Force Base, Utah

Final

Environmental Assessment:

Proposed Truck Offload Station, Hill Air Force Base, Utah

November 9, 2012

Final

Environmental Assessment (EA): Proposed Truck Offload Station, Hill Air Force Base, Utah

Contract No. FA8201-09-D-0006
Delivery Order No. 0057

Department of the Air Force
Air Force Materiel Command
Hill Air Force Base, Utah 84056

November 9, 2012

Prepared in accordance with the Department of the Air Force Environmental Impact Analysis Process (EIAP) 32 CFR Part 989, Effective July 6, 1999, which implements the National Environmental Policy Act (NEPA), the President's Council on Environmental Quality (CEQ) regulations.

EXECUTIVE SUMMARY

Purpose and Need

The purpose of the proposed action is to provide a new truck offload station to improve both efficiency and safety of fuel deliveries at the Hill Air Force Base (AFB) fuel tank farm.

The existing truck offload station limits fuel flow, causing delays in fuel deliveries. Lack of holding areas causes multiple fuel delivery trucks to wait on nearby Sixth Street, slowing traffic and creating a safety hazard near military family housing areas. The existing truck offload station is located in a constricted and elevated area, making it difficult for fuel delivery trucks to safely negotiate the steep entrance and exit ramps. A significant fuel spill occurred at this location due to unsafe traffic patterns.

Selection Criteria

The method of delivering fuel to the Hill AFB tank farm should:

- improve efficiency of fuel deliveries;
- eliminate current safety hazards;
- ensure the logistics readiness squadron can support future mission requirements; and
- be located in a designated truck offload area at the Hill AFB fuel tank farm in accordance with the Hill AFB general plan.

Scope of Review

The issues that were identified for detailed consideration are: air quality, solid and hazardous wastes (including liquid waste streams), and water quality.

Alternatives Considered in Detail

Alternative A (No Action Alternative) - Under the no action alternative, a new truck offload station would not be constructed, and adequate facilities would not be provided. The existing facilities would operate as they currently exist.

Alternative B (Proposed Action - Construct a Truck Offload Station) - The proposed action would include:

- a state-of-the-art four-header truck offload station with access lanes, a fuel delivery truck stacking area, and a larger turn-around area; and
- associated fuel storage, containment, valves, meters, piping, pumps, exterior lighting, security features, and connections to adjacent buried utilities.

Results of the Environmental Assessment

Two alternatives were considered in detail. The results of the environmental assessment are summarized in the following table.

Summary of Predicted Environmental Effects

Issue	Alternative A No Action	Alternative B Proposed Action
Air Quality	Air emissions from fuel delivery and storage activities equal 800 pounds of volatile organic compounds (VOCs) per year.	Construction equipment would create temporary emissions. Fugitive dust emissions would be controlled. Air emissions from fuel delivery and storage activities would equal approximately 800 pounds of VOCs per year. Conformity with the Clean Air Act was demonstrated.
Solid and Hazardous Waste	Any fuel not reclaimed is captured for proper disposal.	If contaminated soils are identified, they would be properly handled during the construction process. Operational activities would generate the same types of waste as the existing facility.
Water Quality	If a sheen is present in the containment vault, it is removed and placed in containers for proper disposal. One spill has occurred outside the containment area due to unsafe traffic patterns.	During construction and operations, water quality would be protected by implementing stormwater management practices. Precipitation from the 95th percentile, 24 hour storm event would be retained on site. If a sheen is observed in the containment vault, it would be removed and placed in containers for proper disposal.

Identification of the Preferred Alternative

Hill AFB prefers Alternative B (the proposed action).

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

LIST OF ACRONYMS AND CHEMICAL TERMS

AFB	Air Force Base
AFOSH	Air Force Occupational Safety and Health
AICUZ	Air Installation Compatible Use Zone
ALC	Air Logistics Complex
bgs	Below Ground Surface
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CWA	Clean Water Act
DAQ	Division of Air Quality (Utah)
DLA	Defense Logistics Agency
DRMO	Defense Reutilization and Marketing Office
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EIS	Environmental Impact Statement
EISA	Energy Independence and Security Act
EPA	Environmental Protection Agency (United States)
ft^2	Square Feet
hr	Hour
IDT	Interdisciplinary Team
lb	Pound
LRS	Logistics Readiness Squadron
MBTA	Migratory Bird Treaty Act
MILCON	Military Construction
MS4	Municipal Separate Storm Sewer System
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO_x	Oxides of Nitrogen
O_3	Ozone

OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyl
PM-10	Particulates Smaller Than 10 Microns in Diameter
PM-2.5	Particulates Smaller Than 2.5 Microns in Diameter
RCRA	Resource Conservation and Recovery Act
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SO_x	Oxides of Sulfur
SPCC	Spill Prevention Control and Countermeasures
SWPPP	Stormwater Pollution Prevention Plan
UAC	Utah Administrative Code
UGS	Utah Geological Survey
USAF	United States Air Force
USC	United States Code
UTTR	Utah Test and Training Range
VOC	Volatile Organic Compound
WFRC	Wasatch Front Regional Council

1 PURPOSE OF AND NEED FOR ACTION

1.1 Introduction

Hill Air Force Base (AFB) is located approximately 25 miles north of downtown Salt Lake City and seven miles south of downtown Ogden, Utah (Figure 1). Hill AFB is surrounded by several communities: Roy and Riverdale to the north; South Weber to the northeast; Layton to the south; and Clearfield, Sunset, and Clinton to the west. The base lies primarily in northern Davis County with a small portion located in southern Weber County.

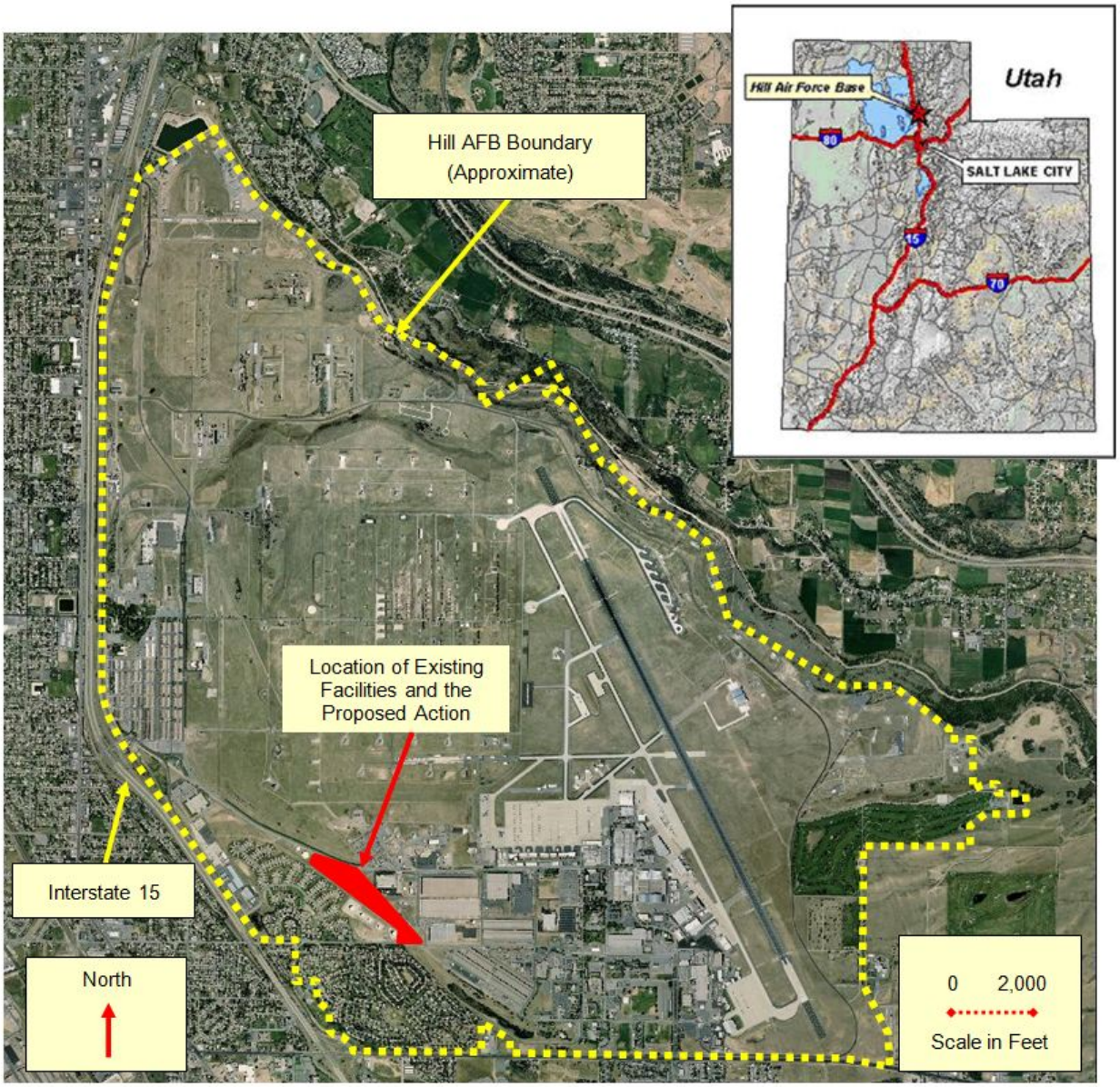

Figure 1: Location of the Proposed Action on Hill AFB

Hill AFB is an Air Logistics Complex (ALC) that maintains aircraft, missiles, and munitions for the United States Air Force (USAF). In support of that mission, Hill AFB provides worldwide engineering and logistics management for the F-22 Raptor, F-35 Joint Strike Fighter, F-16 Fighting Falcon, and A-10 Thunderbolt aircraft. Hill AFB also accomplishes depot repair, modification, and maintenance of the F-16, A-10 Thunderbolt, and C-130 Hercules aircraft. Additional activities include maintaining aircraft landing gear, wheels and brakes for military aircraft, rocket motors, air munitions, guided bombs, photonics equipment, training devices, avionics, instruments, hydraulics, software, and other aerospace-related components.

The 75th Logistics Readiness Squadron (75 LRS) accepts, stores, moves, and dispenses fuel for military aircraft that support Hill AFB missions for training sorties at the Utah Test and Training Range (UTTR) and for worldwide troop and munitions deployments.

1.2 Proposed Action

The proposed action is to provide a new truck offload station to improve both efficiency and safety of fuel deliveries at the Hill AFB fuel tank farm.

The proposed action would consist of:

- Constructing a state-of-the-art four-header truck offload station with access lanes, a fuel delivery truck stacking area, and a larger turn-around area.

- Providing associated fuel storage, containment, valves, meters, piping, pumps, exterior lighting, security features, and connections to adjacent buried utilities.

1.3 Need for the Action

The proposed action is needed due to the following conditions:

- According to military construction (MILCON) project data (Hill 2011) and Hill AFB internal project descriptions (Weed 2010), the existing truck offload station limits fuel flow, causing delays in fuel deliveries.

- Lack of holding areas causes multiple fuel delivery trucks to wait on nearby Sixth Street, slowing traffic and creating a safety hazard near military family housing areas.

- The existing truck offload station is located in a constricted and elevated area, making it difficult for fuel delivery trucks to safely negotiate the steep entrance and exit ramps. A significant fuel spill occurred at this location due to unsafe traffic patterns.

1.4 Purposes of the Proposed Action

The purposes of the proposed action are the following:

- Improve efficiency of fuel deliveries.
- Eliminate current safety hazards.
- Ensure 75 LRS can support future mission requirements

1.5 Relevant EISs, EAs, Laws, Regulations, Plans, and Other Documents

No relevant environmental impact statements (EISs) or environmental assessments (EAs) were identified.

The following federal, state, and local laws and regulations would apply to the proposed action:

- The National Environmental Policy Act (NEPA), Title 42 of the United States Code (USC) Section 4321 *et seq*.
- Council on Environmental Quality NEPA regulations, Title 40 of the Code of Federal Regulations (CFR) Parts 1500-1508.
- USAF-specific NEPA requirements contained in 32 CFR Part 989, Environmental Impact Analysis Process (EIAP).
- Safety guidelines of the Occupational Safety and Health Administration (OSHA).
- Relevant Air Force Occupational Safety and Health (AFOSH) standards.
- Utah's fugitive emissions and fugitive dust rules (Utah Administrative Code [UAC] Section R307-309).
- Utah's State Implementation Plan (SIP [UAC Section R307-110]), which complies with the General Conformity Rule of the Clean Air Act (CAA), Section 176 (c).
- Determining Conformity of Federal Actions to State or Federal Implementation Plans, 40 CFR Part 93.154.
- USAF *Conformity Guide*, 1995.
- Utah Asbestos Rules, UAC, Section R307-801.
- The Resource Conservation and Recovery Act (RCRA), 42 USC Chapter 82, and regulations promulgated thereunder, 40 CFR Part 260 *et seq*.
- Federal facility agreement dated April 10, 1991, under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 42 USC Section 9601 *et seq*.

- Utah hazardous waste management regulations contained in UAC Section R315, and the Hill AFB *Hazardous Waste Management Plan* dated May, 2001, and subsequent versions.

- The Clean Water Act (CWA), 33 USC Section 1251 *et seq*., and Utah statutes and regulations promulgated thereunder.

- The Energy Independence and Security Act (EISA) of 2007, Public Law No. 110-140, Sec. 438, Stormwater Runoff Requirements for Federal Development Projects.

- The Hill AFB *Stormwater Management Program - Municipal Stormwater Permit*, dated August, 2011, and subsequent versions.

- Migratory Bird Treaty Act (MBTA), 16 USC Sections 703-712 *et seq*.

- Bald and Golden Eagle Protection Act, 16 USC Sections 668-668c *et seq*.

- The National Historic Preservation Act (NHPA) of 1966, as amended 16 USC Section 470 *et seq*.

Three Hill AFB resource management plans apply to the proposed action:

- The Hill AFB *Integrated Natural Resources Management Plan*, dated August, 2007, and subsequent versions.

- The Hill AFB *Integrated Cultural Resources Management Plan*, dated January, 2007, and subsequent versions.

- *Spill Prevention Control and Countermeasures (SPCC) Plan for Hill Air Force Base* (Hill 2012a).

During the scoping process, no other documents were identified as being relevant to the proposed action.

1.6 Decisions That Must Be Made

Hill AFB must decide which of the following alternatives to implement:

- Not construct a new truck offload station (no action), or

- Construct a new truck offload station (proposed action).

- If a new truck offload station is constructed, then a location must be selected (see Section 2.2).

1.7 Scope of this Environmental Analysis

The scope of the environmental analysis is to consider issues related to the proposed action and the reasonable alternatives identified within this document.

1.7.1 History of the Planning and Scoping Process

Scoping discussions were conducted by the 75th Civil Engineering Group, Environmental Division (75 CEG/CEV). Participants in the EIAP Interdisciplinary Team (IDT) included proponents of the proposed action, the EIAP manager, resource managers, and the authors of this document. A scoping meeting was conducted at Building 5, Hill AFB, on June 4, 2012. During the scoping process, the EIAP/IDT considered and addressed the following issues:

- air quality;
- solid and hazardous wastes (including liquid waste streams);
- biological resources;
- geology and surface soils;
- water quality;
- cultural resources;
- occupational safety and health;
- air installation compatible use zone (AICUZ); and
- socioeconomic resources.

1.7.2 Issues Studied in Detail

The issues that have been identified for detailed consideration and are therefore presented in Sections 3 and 4 are:

Air Quality (attainment status, emissions, Utah's SIP)

Air emissions would be produced by construction equipment. Operating the proposed action would create air emissions. Air quality effects are discussed in Section 4 of this document.

Solid and Hazardous Wastes (materials to be used, stored, recycled, or disposed, including liquid waste streams; existing asbestos, lead-based paint, mercury, and polychlorinated biphenyls [PCBs])

During construction activities, solid wastes would be generated, and other hazardous wastes might be generated that would require proper treatment and/or disposal. Additional hazardous

wastes could be generated if a spill of fuel, lubricants, or construction-related chemicals were to occur. Operating the proposed action would create solid and hazardous wastes.

Effects related to solid and hazardous wastes are discussed in Section 4 of this document.

Water Quality (surface water, groundwater, water quantity, wellhead protection zones)

Based on information provided by Hill AFB, the land area to be disturbed would be approximately four acres in size. The proposed action would be subject to stormwater permit and compliance requirements both during the construction period and during operations.

Depth to groundwater is approximately 17 feet below the ground surface (bgs) in the vicinity of the proposed action (Parsons 1999). The proposed action would not require excavations deeper than approximately ten feet bgs (for footings, foundations, and on-site utilities).

The scoping discussions did not identify any issues related to quantity of water or wellhead protection zones.

Effects related to water quality are discussed in Section 4 of this document.

Liquid waste streams created during construction and operations are included in the discussions related to solid and hazardous wastes (Section 4 of this document).

1.7.3 Issues Eliminated From Further Study

The issues that were not carried forward for detailed consideration in Sections 3 and 4 are:

Biological Resources (flora and fauna including threatened, endangered, sensitive species; wetlands; floodplains)

Approximately four acres of previously disturbed land would be re-developed by the proposed action. The site is essentially devoid of flora and fauna.

The scoping discussions did not identify any issues related to wetlands or floodplains.

Geology and Surface Soils (seismicity, topography, minerals, geothermal resources, land disturbance, known pre-existing contamination)

The scoping discussions did not identify any issues related to seismicity, topography, minerals, or geothermal resources.

Excavations would be necessary to install: footings; foundations; pavements; and buried utilities consisting of water, electricity, telephone/data, and storm drains. Discussions related to preventing soil erosion (stormwater pollution prevention) are addressed under water quality effects (Section 4 of this document).

Contamination of shallow soil is known to exist approximately 200 feet from the proposed action. Potential discovery of suspicious soils during excavation is addressed under solid and hazardous wastes (Section 4 of this document).

Cultural Resources (archaeological, architectural, traditional cultural properties)

Given the lack of previous findings and the extensive development and disturbance of Hill AFB, the potential for historic properties is extremely low. However, if any such properties are found during construction, ground-disturbing activities in the immediate vicinity will cease, the Hill AFB cultural resources program manager will be notified, and unanticipated discovery of archaeological deposits procedures will be implemented with direction from the Hill AFB cultural resources program manager in accordance with Standard Operating Procedure 5 in the Hill AFB *Integrated Cultural Resources Management Plan* (Hill 2007a).

The Utah State Historic Preservation Office (SHPO) concurred with a finding of no adverse effect after reviewing the proposed action (Appendix A).

Hill AFB has determined formal consultation with American Indian Tribes is not warranted given the absence of resources that may be reasonably construed as being of interest to them.

Occupational Safety and Health (physical and chemical hazards, radiation, explosives, bird and wildlife hazards to aircraft)

Throughout the construction phase of the project, Hill AFB contractors would follow OSHA safety guidelines as presented in the CFR. Hazardous materials that could be used during construction are included in the discussions related to solid and hazardous wastes (Section 4 of this document).

Related to Hill AFB military personnel and civilian employees, the Bio-environmental Engineering Flight (75 AMDS/SGPB) is responsible for implementing AFOSH standards. The AFOSH program addresses (partial list): hazard abatement, hazard communication, training, personal protective equipment and other controls to ensure that occupational exposures to hazardous agents do not adversely affect health and safety, and acquisition of new systems.

The scoping discussions did not identify any issues related to occupational safety and health that would not be routinely addressed by OSHA rules and/or the Bio-engineering Flight.

AICUZ (noise, accident potential, airfield encroachment)

The scoping discussions did not identify any issues related to noise, aircraft accident potential, or airfield encroachment.

Socioeconomic Resources (local fiscal effects including employment, population projections, and schools)

Opportunities would exist for local construction workers if the proposed action is constructed. Operating the proposed action would not be expected to create additional jobs at Hill AFB. The scoping discussions did not identify any issues related to population projections or schools.

1.8 Applicable Permits, Licenses, and Other Coordination Requirements

Obtaining, modifying, and/or complying with the following permits would be required to implement the proposed action.

- The Hill AFB Title V Operating Permit (Permit Number: 1100007001, and subsequent versions). See Section 4.2.1 for additional details.

- Utah's Stormwater General Permit for Construction Activities permit number UTR300000, dated July 1, 2008, and subsequent versions. See Section 4.2.3 for additional details.

- Utah's General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) permit number UTR090000, dated August 1, 2010, and subsequent versions. See Section 4.2.3 for additional details.

- Utah's Multi Sector General Permit for Industrial Facilities permit number UTR000444, dated January, 2008, and subsequent versions. See Section 4.2.3 for additional details.

- The Hill AFB *Stormwater Management Program - Municipal Stormwater Permit*, dated April, 2011, and subsequent versions. See Section 4.2.3 for additional details.

The proponents would coordinate with the Hill AFB hazardous materials program manager (75 CEG/CEVC) to discuss hazardous materials brought on base to construct the proposed action. See Section 4.2.2 for additional details.

2.0 ALTERNATIVES, INCLUDING THE PROPOSED ACTION

2.1 Introduction

This section describes each of the alternatives considered. It documents the process used to develop the alternatives and lists the selection criteria. It presents a comparison matrix of the predicted achievement of project objectives for each of the various alternatives. This section also identifies the Air Force's preferred alternative.

2.2 Description of Alternatives

2.2.1 Alternative A: No Action

Under the no action alternative, a new truck offload station would not be constructed, and adequate facilities would not be provided. The existing facilities would operate as they currently exist. Fighter aircraft training sorties could be delayed or cancelled due to lack of fuel. Fuel delivery truck drivers would continue to risk damage to equipment and causing fuel spills. Motorists along Sixth Street would continue to face fuel delivery truck obstruction hazards. Neither the needs in Section 1.3 nor the purposes in Section 1.4 would be satisfied.

2.2.2 Alternative B: Proposed Action - Construct a Truck Offload Station

The proposed action is to construct a new truck offload station within the four-acre parcel that is shown in Figure 2, mostly north and west of the existing facilities, in the southwestern portion of Hill AFB. The proposed action would provide safer, more efficient fuel off-load operations to meet the demands of an expanding mission.

MILCON project data indicate the proposed action would consist of:

- A state-of-the-art four-header truck offload station with access lanes, a fuel delivery truck stacking area, and a larger turn-around area.

- Associated fuel storage, containment, valves, meters, piping, pumps, exterior lighting, security features, and connections to adjacent buried utilities.

2.2.3 Alternative C: Improve Existing Facilities

This alternative would improve the existing two-header truck offload station.

2.2.4 Alternative D: Deliver Fuel by Rail

Under this alternative, fuel would be delivered to the Hill AFB fuel tank by rail cars.

2.2.5 Alternative E: Deliver Fuel by Pipeline Only

This alternative would require exclusive use of an existing privately-owned pipeline to deliver fuel to the Hill AFB fuel tank farm.

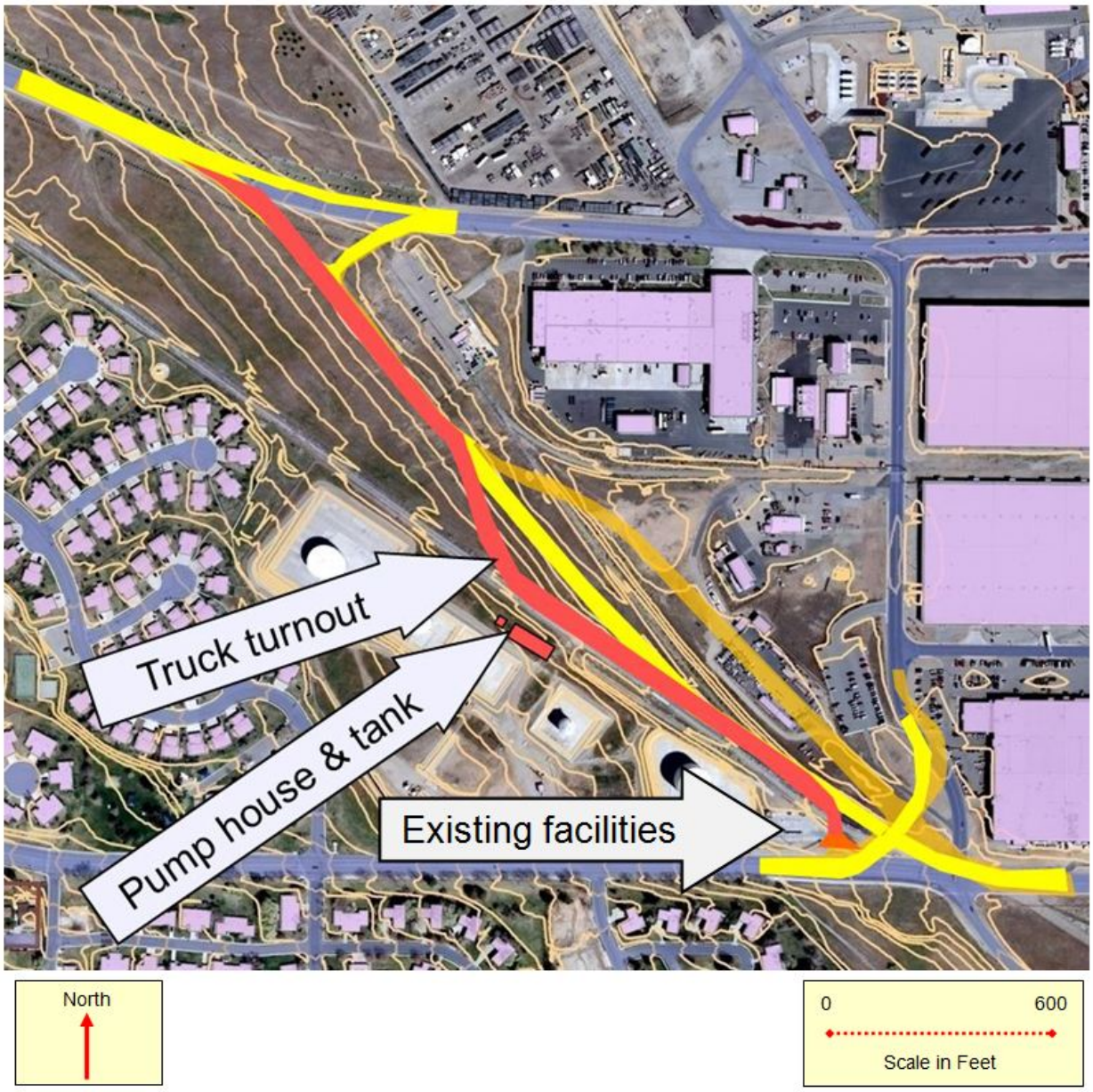

Figure 2: Proposed Facilities and Access Roads

2.3 Process Used to Develop the Alternatives

As discussed in Sections 1.2, 1.3, and 1.4, Hill AFB proposes to provide a new truck offload station. The proposed facility would address the needs discussed in Section 1.3 and the purposes stated in Section 1.4.

Hill AFB planners, engineers, and Facility Working Group explored other alternatives. The feasibility of improving existing facilities and developing other technologies for delivering fuel was compared to the selection criteria. The option to take no action was also considered.

2.3.1 Alternative Selection Criteria

The following selection criteria were used to develop the proposed action and alternatives. The method of delivering fuel to the Hill AFB tank farm should:

- Improve efficiency of fuel deliveries.

  Using current technology, each fuel delivery could be accomplished in 12 minutes. The average rate of fuel deliveries could be increased by over 400 percent.

- Eliminate current safety hazards.

  Because each fuel delivery currently takes 45 minutes to one hour to accomplish, multiple fuel delivery trucks wait on nearby Sixth Street, slowing traffic and creating a safety hazard.

- Ensure 75 LRS can support future mission requirements.

  According to Hill AFB internal project descriptions (Weed 2010), with only the existing facilities, fighter aircraft training sorties could be delayed or cancelled due to inefficiencies in fuel delivery caused by a lack of adequate facilities.

- Be located in a designated truck offload area at the Hill AFB fuel tank farm in accordance with the Hill AFB general plan.

  The Hill AFB general plan dictates development zones applicable to maintaining facilities and building new structures on the base. The fuel tank farm contains structures that safely accept, store, move, and dispense fuel, while providing security and spill containment systems. Segregating these land uses into a contiguous fuel tank farm prevents conflicts with industrial uses, explosive clear zones, warehouses, and residences. It promotes the safety of military personnel and their families, civilian employees, contractors, and base visitors.

2.3.2 Alternatives Eliminated From Detailed Consideration

In addition to the proposed action, three additional alternatives were identified but were eliminated due to not meeting the selection criteria.

<u>Alternative C: Improve Existing Facilities</u>

Improving the existing two-header truck offload station would increase the fuel flow rate, but due to spatial limitations, not to the extent necessary to support future mission requirements. None of the other traffic flow, safety, or spill containment concerns would be addressed.

Alternative D: Deliver Fuel by Rail

Railroad access to the Hill AFB fuel tank farm did exist until 2006. At that time the Defense Logistics Agency (DLA) decided to eliminate railroad access and the rail lines were removed. Land along this route has since been committed to mixed-use commercial development as part of the Falcon Hill enhanced use lease project. In addition to not meeting the selection criteria, this alternative is no longer feasible.

Alternative E: Deliver Fuel by Pipeline Only

The Hill AFB fuel tank farm receives fuel via an existing privately-owned pipeline and via fuel delivery trucks. DLA contracts with multiple suppliers in different parts of the country. Not all of the suppliers have contractual access to the pipeline, requiring the use of fuel delivery trucks to supply significant amounts of the required fuel supply. Even if sufficient fuel could be delivered by the pipeline, an efficient truck offload station would be required as a redundant system should the pipeline go out of service for any reason.

2.4 Summary Comparison of the Alternatives and Predicted Achievement of the Project Objectives

2.4.1 Summary Comparison of Project Alternatives

The no action alternative (Alternative A) would be to continue current operations using the existing facilities.

Considering implementation of Alternatives A, B, C, D, and E, only Alternative B (the proposed action) would fully satisfy the selection criteria from Section 2.3.1.

2.4.2 Predicted Achievement of Project Objectives

	Alternatives from Section 2.2				
	A No Action	**B** Proposed Action	**C** Improve Existing Facilities	**D** Rail	**E** Pipeline Only
Purposes of the Proposed Action from Section 1.4					
Improve efficiency of fuel deliveries	No	Yes	No	No	No
Eliminate current safety hazards	No	Yes	No	No	No
Ensure 75 LRS can support future mission requirements	No	Yes	No	No	No
Additional Selection Criterion from Section 2.3.1					
Be located in a designated truck offload area at the Hill AFB fuel tank farm in accordance with the Hill AFB general plan	Yes	Yes	Yes	No	Yes

Table 1: Predicted Achievement of Project Objectives

2.5 Identification of the Preferred Alternative

Hill AFB prefers Alternative B (the proposed action).

3.0 AFFECTED ENVIRONMENT

3.1 Introduction

Section 3 of this document discusses the existing conditions of the potentially affected environment, establishing a resource baseline against which the effects of the various alternatives can be evaluated. It presents relevant facilities and operations, environmental issues, pre-existing environmental factors, and existing cumulative effects due to human activities in the vicinity of the proposed action or the alternative locations.

Issues discussed during scoping meetings, but eliminated from detailed consideration (see Section 1.7.3) include:

- biological resources (flora and fauna including threatened, endangered, sensitive species; wetlands; floodplains);
- geology and surface soils (seismicity, topography, minerals, geothermal resources, land disturbance, known pre-existing contamination);
- cultural resources (archaeological, architectural, traditional cultural properties);
- occupational safety and health (physical and chemical hazards, radiation, explosives, bird and wildlife hazards to aircraft);
- AICUZ (noise, accident potential, airfield encroachment); and
- socioeconomic resources (local fiscal effects including employment, population projections, and schools).

3.2 Description of Relevant Facilities and Operations

As stated above, the existing facilities do not comply with the criteria to provide efficient, safe facilities capable of supporting future mission requirements. No other relevant facilities or operations were identified.

3.3 Description of Relevant Affected Issues

3.3.1 Air Quality

Compared to federal clean air standards, Utah's Division of Air Quality (DAQ) reports five non-attainment and/or maintenance area designations (Figures 3-7 [DAQ 2012]) in the vicinity of Hill AFB. Non-attainment areas fail to meet national ambient air quality standards (NAAQS) for one or more of the criteria pollutants: oxides of nitrogen (NOx), sulfur dioxide (SO_2), ozone (O_3), particulates less than 10 microns in diameter (PM-10), particulates less than 2.5 microns in diameter (PM-2.5), carbon monoxide (CO), and lead. Maintenance areas were once designated as non-attainment, but are now consistently meeting the NAAQS.

Figure 3: State of Utah Areas of Non-Attainment for PM-10

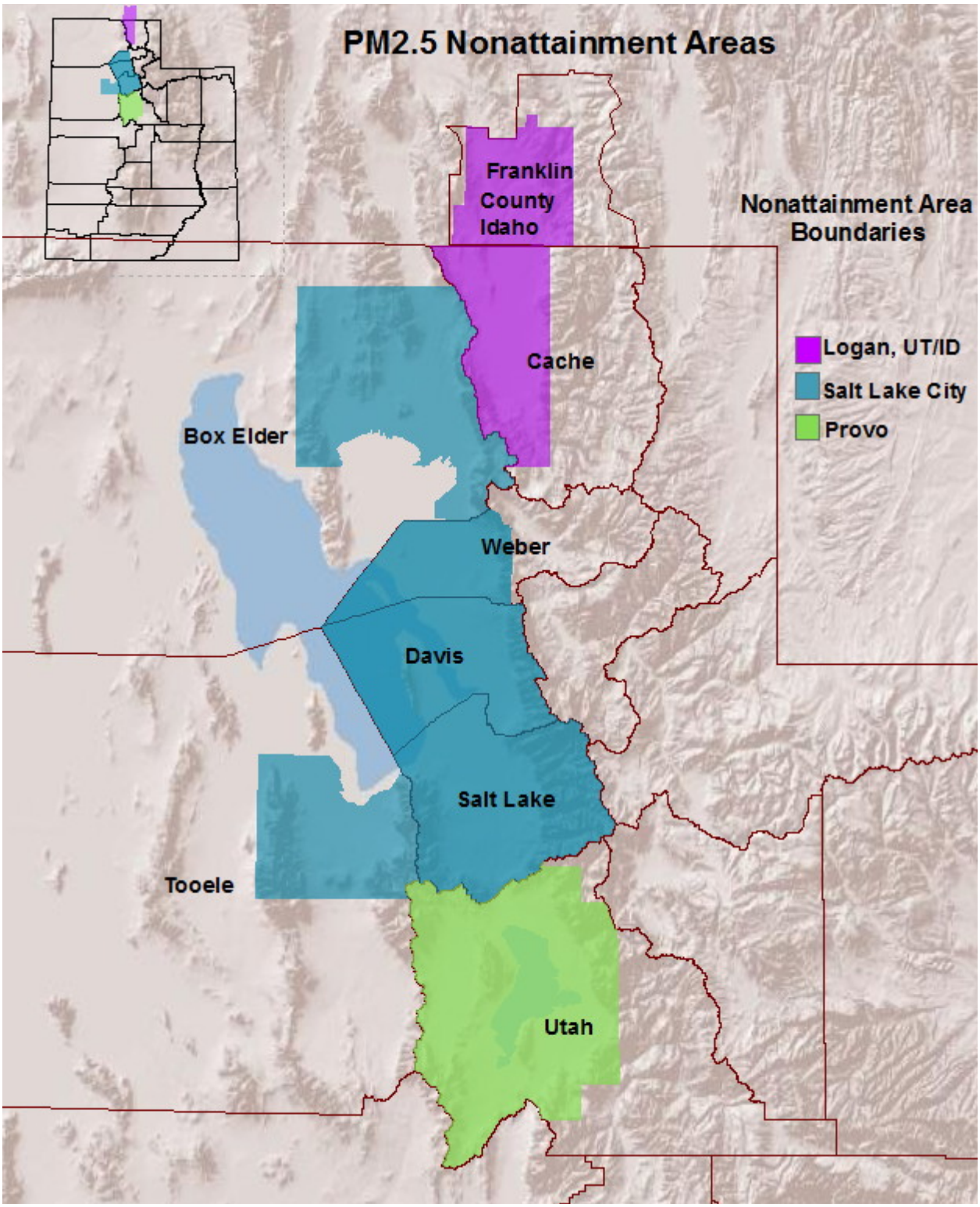

Figure 4: State of Utah Areas of Non-Attainment for PM-2.5

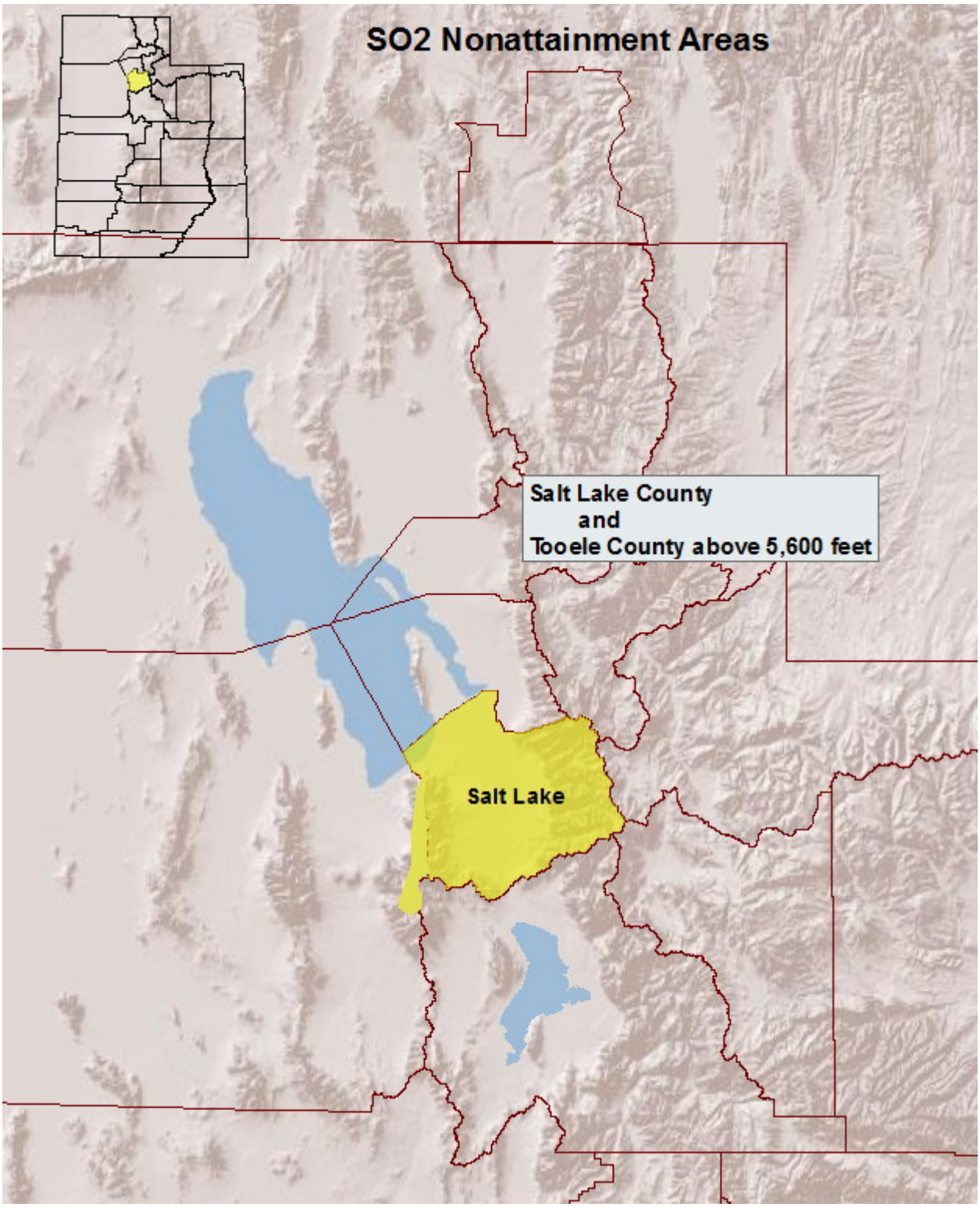

Figure 5: State of Utah Areas of Non-Attainment for SO_2

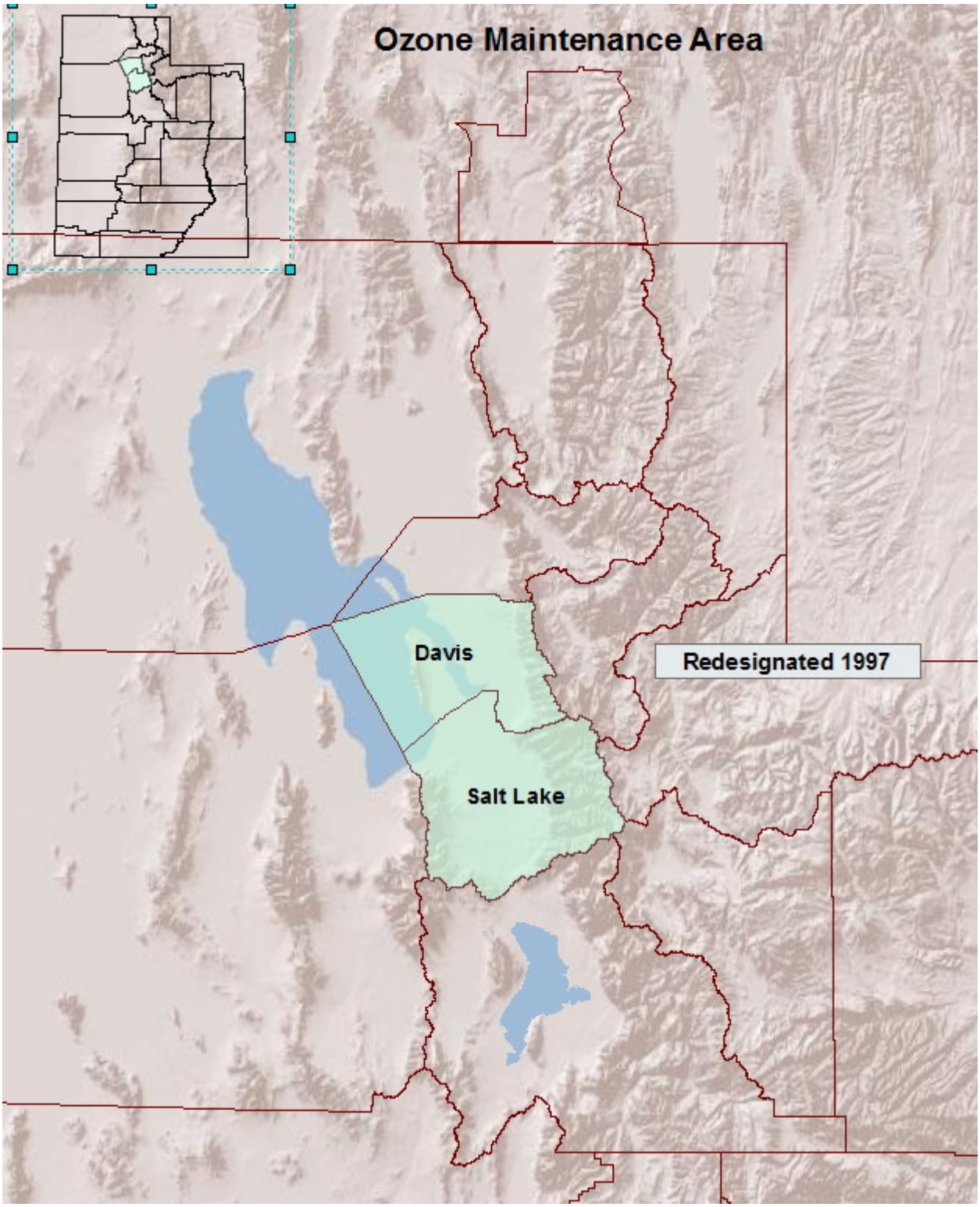

Figure 6: State of Utah Maintenance Areas for Ozone

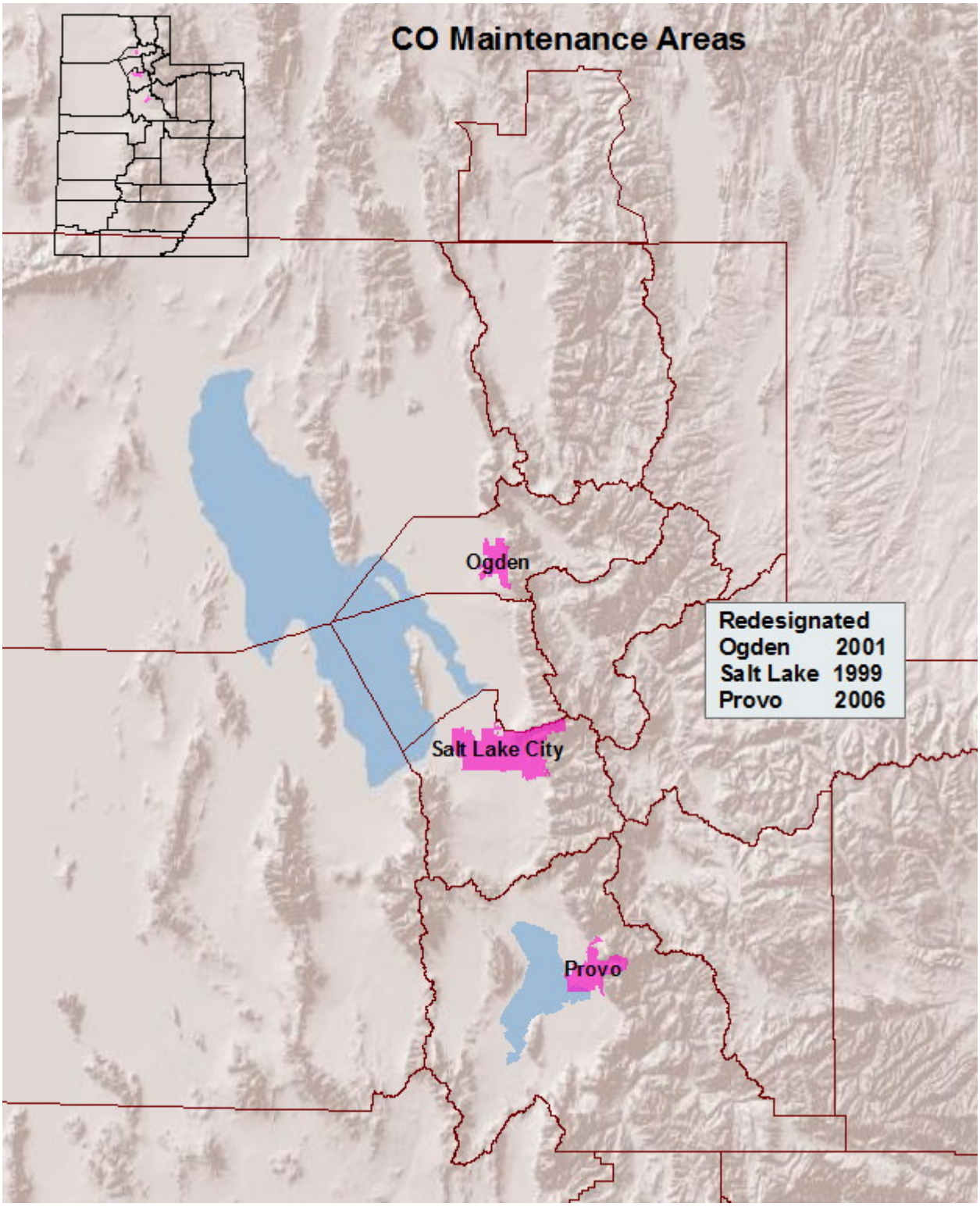

Figure 7: State of Utah Maintenance Areas for CO

The current air quality trend at Hill AFB is one of controlling emissions as Hill AFB managers implement programs to eliminate ozone-depleting substances, limit use of volatile organic compounds (VOCs), switch to lower vapor pressure solvents and aircraft fuel, convert internal combustion engines from gasoline and diesel to natural gas, and improve the capture of particulates during painting and abrasive blasting operations (in compliance with the base's Title V air quality permit).

Table 2 presents annual emission estimates for criteria pollutants and VOCs for Hill AFB (Hill 2012b) and for Davis and Weber Counties (DAQ 2012).

Location	Emissions By Pollutant (tons/year)					
	CO	NOx	PM-10	PM-2.5	SOx	VOC
Hill AFB	131	190	20	12	1	199
Davis County	53,384	8,173	5,279	1,071	1,048	17,566
Weber County	42,534	5,581	3,970	936	154	14,369

Table 2: Baseline Air Pollutants

Based on the quantity of fuel delivered in 2011, air emissions calculated for the existing truck offload station and fuel storage tanks equal 800 pounds of VOCs per year (CH2M 2012).

3.3.2 Solid and Hazardous Wastes

In general, hazardous wastes include substances that, because of their concentration, physical, chemical, or other characteristics, may present substantial danger to public health or welfare or to the environment when released into the environment or otherwise improperly managed. Potentially hazardous and hazardous wastes generated at Hill AFB are managed as specified in the *Hill AFB Hazardous Waste Management Plan* with oversight by personnel from the Environmental Management Division and the Defense Reutilization and Marketing Office (DRMO). Hazardous wastes at Hill AFB are properly stored during characterization, and then manifested and transported off site for treatment and/or disposal.

Fuel deliveries occur within a containment area, as dictated by the *SPCC Plan for Hill Air Force Base* (Hill 2012a). All deliveries are observed by Hill AFB fuels flight representatives, who respond to any drips, leaks, or spills that occur. Drips and leaks are either removed using sorbent materials, which are placed in containers for proper disposal, or caught in pans and reclaimed. Spills flow to a containment vault. Containment for an entire truck load of fuel is provided by this concrete vault, whose valve is kept in the closed position. When additional support is needed, the Hill AFB Fire Department is called to assist.

No other waste streams were identified for the existing truck offload station.

3.3.3 Water Quality

In areas of Hill AFB that are not heavily developed, runoff is allowed to infiltrate into the ground through overland flow or surface ditches, discharging to large unoccupied areas. In developed areas, stormwater is typically conveyed to 14 retention or detention ponds within Hill AFB boundaries.

No surface water bodies are present within the area occupied by the exiting truck offload station or the area proposed for constructing the new facility. Based on a review of the *Hill AFB Stormwater Management Program - Municipal Stormwater Permit* (Stantec 2011), storm drains convey surface runoff from this area of Hill AFB to Pond 6, a retention pond, and Pond 3, a wet detention pond that discharges to Kay's Creek. Best management practices for Pond 3 are surface contaminant collection booms, aerators to prevent the water from becoming stagnant, and a trash rack at the outlet to collect litter and debris (Stantec 2011).

When rainwater or snowmelt begins to accumulate in the containment vault, it is inspected for a sheen. If a sheen is present, it is removed and placed in containers for proper disposal. Clean water is then released to the Hill AFB storm drainage system.

A spill occurred outside the containment area when a fuel trailer struck a concrete wall and the fuel tank ruptured. The trailer was immediately pulled into the containment area, but some fuel had already entered the Hill AFB storm drainage system and flowed to Pond 3, where it was captured and removed.

The proposed action would not be located within a wellhead protection zone.

3.4 Description of Relevant Pre-Existing Environmental Factors

The Wasatch Front Regional Council (WFRC 2003) assessed earthquake hazards for Davis County, Utah, including the portion of Hill AFB that includes the alternatives discussed in this document. The Davis County liquefaction potential map shows this area of Hill AFB to be in the zone labeled as very low risk. The Davis County earthquake hazard map shows this area of Hill AFB to be outside of known fault zones. The Davis County landslide hazard map shows this area of Hill AFB to be outside of known landslide risk zones.

During scoping discussions and subsequent analysis, no other pre-existing environmental factors (e.g., hurricanes, tornados, floods, droughts) were identified for the proposed action.

3.5 Description of Areas Related to Cumulative Effects

For air quality, the area related to cumulative effects would include Hill AFB, Davis County, and Weber County.

For solid and hazardous wastes, the area related to cumulative effects would include Hill AFB.

For water quality, the area related to cumulative effects would include Hill AFB and waters downstream from the Hill AFB stormwater detention ponds.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

This section discusses effects to the resources that were identified for detailed analysis in Section 1.7.2, and for which existing conditions were presented in Section 3.3. For each of these resources, the following analyses are presented:

- direct, indirect, and cumulative effects of no action (Alternative A); and
- direct, indirect, and cumulative effects of the proposed action (Alternative B).

4.2 Predicted Effects to Relevant Affected Resources

4.2.1 Predicted Effects to Air Quality

4.2.1.1 Alternative A: No Action

Existing air emissions as explained in Section 3.3.1 would continue. The no action alternative would have no other direct effects, no indirect effects, and no cumulative effects.

4.2.1.2 Alternative B: Proposed Action - Construct a Truck Offload Station

Direct Effects Due to Construction

Fugitive Dust: Fugitive emissions from construction activities would be controlled according to UAC Section R307-205, *Emission Standards: Fugitive Emissions and Fugitive Dust* and the Hill AFB *Fugitive Dust Plan*. Good housekeeping practices would be used to maintain construction opacity at less than 20 percent. Haul roads would be kept wet. Any soil that is deposited on nearby paved roads by construction vehicles would be removed from the roads and either returned to the site or placed in an appropriate on-base disposal facility.

Heavy Equipment: The internal combustion engines of heavy equipment would generate air emissions. Assumptions and estimated emissions from heavy equipment constructing the proposed truck offload station are listed in Table 3.

Additional air emissions would be generated from laying a three-inch thick course of hot-mix asphalt. Based on three acres of paved area and emission factors from the United States Environmental Protection Agency (EPA 2004), less than four pounds of VOCs would be released.

Data Assumptions

Equipment Type	Emission Factor (lb/hr) CO	NOx	PM-10	PM-2.5	SO_2	VOC
Diesel Water Truck	1.37	3.63	0.27	0.26	0.49	0.29
Diesel Road Compactors	0.33	1.08	0.07	0.07	0.16	0.08
Diesel Paver	0.33	1.08	0.07	0.07	0.16	0.08
Diesel Dump Truck	1.37	3.63	0.27	0.26	0.49	0.29
Diesel Excavator	0.86	3.04	0.21	0.21	0.49	0.22
Diesel Trenchers	0.94	2.24	0.18	0.17	0.29	0.20
Diesel Bore/Drill Rigs	1.51	4.73	0.33	0.32	0.48	0.40
Diesel Cement & Mortar Mixers	1.53	4.81	0.32	0.31	0.48	0.40
Diesel Cranes	0.50	2.21	0.13	0.13	0.28	0.17
Diesel Graders	0.90	3.13	0.22	0.21	0.49	0.23
Diesel Tractors/Loaders/Backhoes	1.81	1.59	0.30	0.29	0.21	0.41
Diesel Bull Dozers	0.91	3.15	0.22	0.21	0.49	0.24
Diesel Front End Loaders	1.03	3.31	0.23	0.22	0.49	0.25
Diesel Fork Lifts	1.71	1.89	0.31	0.30	0.21	0.44
Diesel Generator Set	0.33	0.53	0.06	0.06	0.07	0.11

Construct Truck Offload Station and Associated Facilities

EQUIPMENT TYPE	HOURS OF USE	Emissions (lb) CO	NOx	PM-10	PM-2.5	SO_2	VOC
Diesel Water Truck	8	11.0	29.0	2.2	2.1	3.9	2.3
Diesel Road Compactors	88	28.7	95.1	6.6	6.4	14.4	7.2
Diesel Paver	8	2.6	8.6	0.6	0.6	1.3	0.7
Diesel Dump Truck	88	120.5	319.5	23.9	23.3	43.1	25.6
Diesel Excavator	360	309.5	1095.3	76.2	73.8	176.2	81.0
Diesel Trenchers		0.0	0.0	0.0	0.0	0.0	0.0
Diesel Bore/Drill Rigs		0.0	0.0	0.0	0.0	0.0	0.0
Diesel Cement & Mortar Mixers	16	24.6	77.0	5.1	5.0	7.7	6.5
Diesel Cranes	120	60.2	264.8	15.7	15.3	33.8	20.4
Diesel Graders	8	7.2	25.0	1.7	1.7	3.9	1.9
Diesel Tractors/Loaders/Backhoes		0.0	0.0	0.0	0.0	0.0	0.0
Diesel Bull Dozers		0.0	0.0	0.0	0.0	0.0	0.0
Diesel Front End Loaders		0.0	0.0	0.0	0.0	0.0	0.0
Diesel Fork Lifts	8	13.7	15.1	2.5	2.4	1.7	3.5
Diesel Generator Set		0.0	0.0	0.0	0.0	0.0	0.0
TOTAL ESTIMATED EMISSIONS (lb)		**577.9**	**1929.5**	**134.4**	**130.5**	**286.0**	**148.9**
TOTAL ESTIMATED EMISSIONS (tons)		**0.29**	**0.96**	**0.07**	**0.07**	**0.14**	**0.07**

Emission factors based on US Department of Homeland Security modeling, which used EPA's NONROAD2005 model

Hours of use based on estimates from Everett Reynolds, 75 CEG/CEP project manager, 3/27/12

Table 3: Calculated Heavy Equipment Emissions for Construction

Direct Effects Due to Operations

The proposed action would replace existing operations. Air emissions due to operating the proposed action would be expected to remain at approximately 800 pounds of VOCs per year.

Prior to operating the proposed action, Hill AFB air quality managers would submit notices of intent, seven day notifications, and modification requests to DAQ. Hill AFB would not be allowed to operate the facilities until DAQ concurs that federal and state requirements are being met, and an administrative amendment to the Hill AFB Title V Operating Permit is granted.

Conformity Applicability Determination

Due to local non-attainment status, a conformity applicability determination (compliant with 40 CFR 93.153 and UAC R-307-115) was completed for the proposed action. The proposed action would be required to demonstrate conformity with the CAA unless an applicability determination shows that it is exempt from conformity, in this case, due to having annual emissions below the thresholds established in 40 CFR 93.153(b)(1) and (b)(2). Predicted air emissions due to construction and due to operations were all much less than the established threshold values.

Indirect Effects

During scoping and the detailed analysis, no indirect effects related to air quality were identified for the proposed action.

Cumulative Effects

Construction: Construction-related air emissions would be limited to a duration of several months. Comparing the magnitude of predicted construction-related air emissions (Table 3) to existing emissions for Hill AFB, Davis and Weber Counties (Table 2), there would not be significant cumulative effects to air quality associated with constructing the proposed action.

Operations: Hill AFB air quality managers would ensure that long-term operation of the proposed action complies with the Hill AFB Title V Operating Permit, any relevant approval orders, EPA regulations, and the Utah SIP. Any required air quality control devices would be installed and tested prior to allowing newly installed equipment to begin operating. Comparing the magnitude of predicted operational air emissions to existing emissions in Hill AFB, Davis and Weber Counties (Table 2), no significant cumulative effects to air quality were identified for operating the proposed action.

4.2.2 Predicted Effects to Solid and Hazardous Waste

4.2.2.1 Alternative A: No Action

Under the no action alternative, the wastes discussed in Section 3.3.2 would continue to be generated. With respect to solid and hazardous waste, the no action alternative would have no other direct effects, no indirect effects, and no cumulative effects.

4.2.2.2 Alternative B: Proposed Action - Construct a Truck Offload Station

Direct Effects Due to Construction

Waste Generation: During the proposed construction activities, solid wastes expected to be generated would be construction debris consisting mainly of concrete, metal, and building materials. These items would be treated as uncontaminated trash and recycled when feasible. It is possible that equipment failure or a spill of fuel, lubricants, or construction-related chemicals could generate solid or hazardous wastes. In the event of a spill of regulated materials, Hill AFB environmental managers and their contractors would comply with all federal, state, and local spill reporting and cleanup requirements.

Waste Management: Hill AFB personnel have specified procedures for handling construction-related solid and hazardous wastes in their engineering construction specifications. The procedures are stated in Section 01000, General Requirements, Part 1, General, Section 1.24, Environmental Protection. All solid non-hazardous waste is collected and disposed or recycled on a routine basis. Hazardous wastes are stored at sites operated in accordance with the requirements of 40 CFR 265. The regulations require the generator to characterize hazardous wastes with analyses or process knowledge. Suspect waste is labeled as hazardous waste and is safely stored while analytical results are pending or until sufficient generator knowledge is obtained. Hazardous wastes are eventually labeled, transported, treated, and disposed in accordance with federal and state regulations.

Excavated Soils: There is no known soil contamination at the location of the proposed action. However, excavations could potentially encounter contaminated soil. If unusual odors or soil discoloration were to be observed during any excavation or trenching necessary to complete the proposed action, the soil would be stored on plastic sheeting and the Hill AFB Environmental Restoration Branch (75 CEG/CEVR) would be notified. Any excess clean soil would either be used as fill for another on-site project or placed in the Hill AFB landfill. Any soil determined to be hazardous would be eventually labeled, transported, treated, and disposed in accordance with federal and state regulations. No soil would be taken off base without prior 75 CEG/CEVR written approval.

Direct Effects Due to Operations

Based on information received during the scoping meeting and subsequent discussions with the proponent, the types of solid and hazardous wastes to be generated due to operating the proposed action would be the same as for the existing facility.

Indirect Effects

During scoping and the detailed analysis, no indirect effects related to solid and hazardous waste were identified for the proposed action.

Cumulative Effects

Proper handling of solid and hazardous waste eliminates releases of contaminants to the environment or reduces such releases in conformity with legal limits. There would be no significant cumulative solid or hazardous waste effects associated with the proposed action.

4.2.3 Predicted Effects to Water Quality

4.2.3.1 Alternative A: No Action

Under the no action alternative, effects to water quality would remain as discussed in Section 3.3.3. With respect to water quality, the no action alternative would have no other direct effects, no indirect effects, and no cumulative effects.

4.2.3.2 Alternative B: Proposed Action - Construct a Truck Offload Station

Direct Effects Due to Construction

Based on information provided by Hill AFB engineers, the land area to be disturbed by the proposed facility would be approximately four acres in size. The proposed action would be covered under Utah's general construction permit rule for stormwater compliance. Prior to initiating any construction activities, this permit must be obtained and erosion and sediment controls must be installed according to a stormwater pollution prevention plan (SWPPP). The SWPPP would specify measures to prevent soil from leaving the construction site on the wheels of construction vehicles, thereby controlling the addition of sediments to the storm drain system. The proponents would coordinate with the Hill AFB water quality manager (75CEG/CEVC) prior to submitting an application for a Utah construction stormwater permit.

Design engineers would ensure that components of the existing stormwater collection system would not be damaged, by avoiding or relocating the relevant structures. Hill AFB construction specifications would require the contractor to restore the land to a non-erosive condition. All areas disturbed by excavation would be backfilled, and then either be covered by pavements, gravel, or re-planted, re-seeded, or sodded to prevent soil erosion.

Since the proposed action would convert a small area occupied by open land to impermeable surfaces, some increased stormwater runoff volume would be expected unless runoff controls were to be created during construction of the facility. EISA Section 438 specifies stormwater runoff requirements for federal development projects. The sponsor of any development or redevelopment project involving a federal facility with a footprint that exceeds 5,000 square feet (ft^2) must ensure that all precipitation from the 95th percentile, 24-hour storm event is retained on site (for Hill AFB, this storm depth is 0.8 inches [Zautner 2010]). Compliance with this requirement (by designing and constructing detention and/or retention structures) would eliminate downstream effects due to creating impermeable surfaces.

Direct Effects Due to Operations

The proposed facility would be subject to Utah's multi-sector general permit for industrial facilities. The *Hill AFB Stormwater Management Program - Municipal Stormwater Permit*

establishes good housekeeping measures and other best management practices to prevent contamination of runoff.

Whenever rainwater or snowmelt would accumulate in the containment vault, it would be inspected for a sheen. If a sheen were to be observed, it would be removed and placed in containers for proper disposal. Clean water would then be released to the Hill AFB storm drainage system.

The proposed action would allow all fuel delivery trucks to enter the containment area upon arrival and would eliminate unsafe traffic patterns. The risk of spills resulting in fuel entering the Hill AFB storm drainage system would be greatly reduced. In the unlikely event of a spill outside the containment area, local storm drains would the fuel either to Hill AFB Pond 3 or Hill AFB Pond 6 (it could be either - engineering design has not been conducted for the proposed action). In either case, the fuel would be captured and removed from the appropriate pond.

Indirect Effects

During scoping and the detailed analysis, no indirect effects related to water quality were identified for the proposed action.

Cumulative Effects

Water quality would be protected during construction and operations. There would be no significant cumulative water quality effects associated with the proposed action.

4.3 Summary Comparison of Predicted Environmental Effects

This section only applies to the alternatives considered in detail.

Issue	Alternative A No Action	Alternative B Proposed Action
Air Quality	Air emissions from fuel delivery and storage activities equal 800 pounds of VOCs per year.	Construction equipment would create temporary emissions. Fugitive dust emissions would be controlled. Air emissions from fuel delivery and storage activities would equal approximately 800 pounds of VOCs per year. Conformity with the Clean Air Act was demonstrated.
Solid and Hazardous Waste	Any fuel not reclaimed is captured for proper disposal.	If contaminated soils are identified, they would be properly handled during the construction process. Operational activities would generate the same types of waste as the existing facility.
Water Quality	If a sheen is present in the containment vault, it is removed and placed in containers for proper disposal. One spill has occurred outside the containment area due to unsafe traffic patterns.	During construction and operations, water quality would be protected by implementing stormwater management practices. Precipitation from the 95th percentile, 24 hour storm event would be retained on site. If a sheen is observed in the containment vault, it would be removed and placed in containers for proper disposal.

Table 4: Summary Comparison of Predicted Environmental Effects

5.0 LIST OF PREPARERS

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Sam Johnson, EIAP Manager, (801) 775-3653

6.0 LIST OF PERSONS AND AGENCIES CONSULTED

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CH2M HILL, Inc.
7274 Wardleigh Road, Hill AFB UT 84056
Sara Van Klooster, Air Emissions Inventory, (801) 775-5173

7.0 REFERENCES

CFR: *Code of Federal Regulations*, US Government Printing Office, Office of the Federal Register, current versions, which are located at:
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=%2Findex.tpl

29 CFR 1910, *Occupational Safety And Health Standards*
32 CFR 989, *Environmental Impact Analysis Process*
40 CFR 265, *Interim Status Standards For Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities*
40 CFR 1500-1508, *Council on Environmental Quality*
40 CFR 93.154, *Determining Conformity of Federal Actions to State or Federal Implementation Plans*

CH2M 2012: Spreadsheet provided by Hill AFB contractor CH2M HILL, April, 2012.

DAQ 2012: *Division of Air Quality Annual Report for 2011*, Utah Division of Air Quality, January, 2012.

Hill AFB: *Construction Specifications, Section 01000, General Requirements, Part 1, General, Section 1.24, Environmental Protection*, Hill AFB, UT, current version.

Hill 2007a: *Integrated Cultural Resources Management Plan*, Hill AFB, 2007.

Hill 2007b: *Integrated Natural Resources Management Plan*, Hill AFB, 2007.

Hill 2011: *FY 2016 Military Construction Project Data, Commercial Truck Off-Load Station*, Hill AFB, September, 2011.

Hill 2012a: *Spill Prevention Control and Countermeasures (SPCC) Plan for Hill Air Force Base*, Hill AFB, April, 2012.

Hill 2012b: *2011 Annual Criteria and Toxic Pollutant Emission Inventory*, Hill AFB, prepared by CH2M HILL, April, 2012.

Parsons 1999: *Final Intrinsic Remediation, Engineering Evaluation/Cost Analysis Addendum for UST Site 870, Hill Air Force Base, Ogden, Utah*, Parsons Engineering Science, Inc., September, 1999.

Stantec 2011: *Hill AFB Stormwater Management Program - Municipal Stormwater Permit*, Stantec Consulting, August, 2011.

UGS 1994a: *Earthquake Ground Shaking in Utah*, Utah Geological Survey, 1994.

UGS 1994b: *Liquefaction Potential for a Part of Weber County, Utah*, Utah Geological Survey, 1994.

UGS 2009: *Earthquake Fault Map of a Portion of Weber County, Utah*, Utah Geological Survey, current on website as of March, 2009.

Weed 2010: *Commercial Truck Off-Load Station*, Steve Weed, September, 2010.

WFRC 2003: *Natural Hazard Pre-Disaster Mitigation Plan, Utah's Wasatch Front*, Wasatch Front Regional Council, December, 2003.

Zautner 2004: *Hill AFB 95th Percentile 24-hour Precipitation Amount*, Jeffrey H. Zautner, Meteorologist, Air Force Combat Climatology Center, June 10, 2010.

APPENDIX A

CULTURAL RESOURCES FINDING OF NO ADVERSE EFFECT

DEPARTMENT OF THE AIR FORCE
75TH CIVIL ENGINEER GROUP (AFMC)
HILL AIR FORCE BASE UTAH

13 August 2012

Mr. Robert T. Elliott
Chief, Environmental Management Division
75 CEG/CEV
7274 Wardleigh Road
Hill Air Force Base Utah 84056-5137

Ms. Lori Hunsaker
State Historic Preservation Office
300 Rio Grande
Salt Lake City Utah 84101

Dear Mr. Hansen, Ms. Hunsaker, and Ms. Palmer

Hill Air Force Base (AFB) is currently proposing to build a truck offload station to improve efficiency and safety of fuel deliveries at the Hill AFB fuel tank farm. The Area of Potential Effect (APE) is 33.75 acres in Davis County, Utah (Attachment 1). The current truck offload station limits fuel flow, causing delays in fuel deliveries, lacks holding areas, creating a safety hazard near military family housing areas, and is located in a constricted area, creating unsafe traffic patterns.

Within Hill AFB, three previous inventories have comprised cultural resources survey of 840 acres (U-91-WC-687m, U-95-WC-280p, and U-01-HL-164m). Results from these projects include the recordation of one historic refuse dump (42DV51) and two prehistoric isolates, all determined ineligible for listing on the National Register of Historic Places. Inventory efforts have resulted in the survey of 12.5 percent of the total area of Hill AFB. None of the previous inventories fall within the APE of the current proposed project.

Development and associated infrastructure will encompass the entire APE of the current project. Given the lack of previous findings and the extensive development and disturbance of Hill AFB, the potential for archaeological historic properties is extremely low. However, if any archaeological resources are found during construction, ground-disturbing activities in the immediate vicinity will cease, the Hill AFB Cultural Resources Program will be notified, and the unanticipated discovery of archaeological deposits procedures shall be implemented with direction from the Hill AFB Cultural Resources Program and in accordance with the Hill AFB Integrated Cultural Resources Management Plan (Attachment 2).

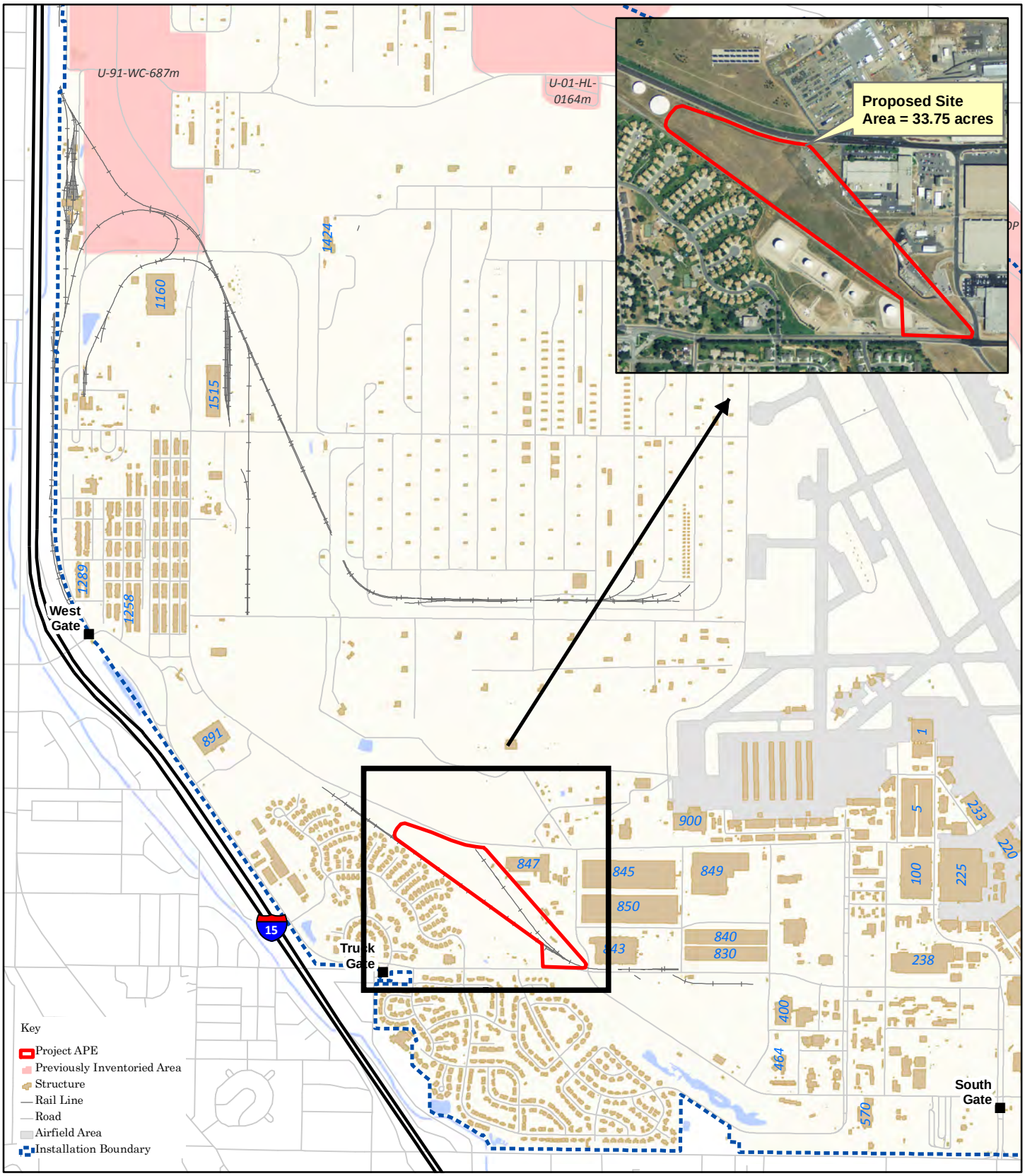
Therefore, Hill AFB has determined the proposed project will have no effect to historic properties [36 CFR §800.4(d) (1)]. I request your concurrence in these determinations as specified in 36 CFR §800.

Should you or your staff have any questions about the proposed project, please contact our archaeologist, Ms. Jaynie Hirschi, 75 CEG/CEVP, at (801) 775-6920 or at jaynie.hirschi@hill.af.mil.

Sincerely

ROBERT T. ELLIOTT, P.E., GS-14, DAF
Chief, Environmental Management Division
75th Civil Engineer Group

2 Attachments:
1. Area of Potential Effects for the Proposed Truck Offload Station, Hill Air Force Base, Utah
2. Unanticipated Discovery of Archaeological Deposits



Area of Potential Effects for the
Proposed Truck Offload Station
Hill Air Force Base, Utah

1: 24,000

0 255 510 1,020 Meters

0 1,000 2,000 4,000 Feet

N

Standard Operating Procedure

UNANTICIPATED DISCOVERY OF ARCHAEOLOGICAL DEPOSITS

APPLICABLE LAWS AND REGULATIONS

- National Historic Preservation Act
- National Environmental Policy Act
- Native American Graves Protection and Repatriation Act
- AFI 32–7065 (June 2004), *Cultural Resources Management Program*

OVERVIEW

All undertakings that disturb the ground surface have the potential to discover buried and previously unknown archaeological deposits. The accidental discoveries of archaeological deposits during an undertaking can include but are not limited to:

- Undiscovered/undocumented structural and engineering features; and
- Undiscovered/undocumented archaeological resources such as foundation remains, burials, artifacts, or other evidence of human occupation.

POLICY

When cultural resources are discovered during the construction of any undertaking or ground-disturbing activities, Hill AFB shall:

- Evaluate such deposits for NRHP eligibility.
- Treat the site as potentially eligible and avoid the site insofar as possible until an NRHP eligibility determination is made.
- Make reasonable efforts to minimize harm to the property until the Section 106 process is completed.
- **The BHPO will ensure that the provisions of NAGPRA are implemented first if any unanticipated discovery includes human remains, funerary objects, or American Indian sacred objects (see SOP #6).**

PROCEDURE

Step 1: Work shall cease in the area of the discovery (Figure 5-5). Work may continue in other areas.

- The property is to be treated as eligible and avoided until an eligibility determination is made. Hill AFB will continue to make reasonable efforts to avoid or minimize harm to

Further construction activities in the vicinity of the site will be suspended until an agreed-upon testing strategy has been carried out and sufficient data have been gathered to allow a determination of eligibility. The size of the area in which work should be stopped shall be determined in consultation with the **BHPO**.

the property until the Section 106 process is completed.

Step 2: Immediately following the discovery, the **Project Manager** shall notify the installation **BHPO**.

Step 3: The **BHPO** or a professional archaeologist shall make a field evaluation of the context of the deposit and its probable age and significance, record the findings in writing, and document with appropriate photographs and drawings.

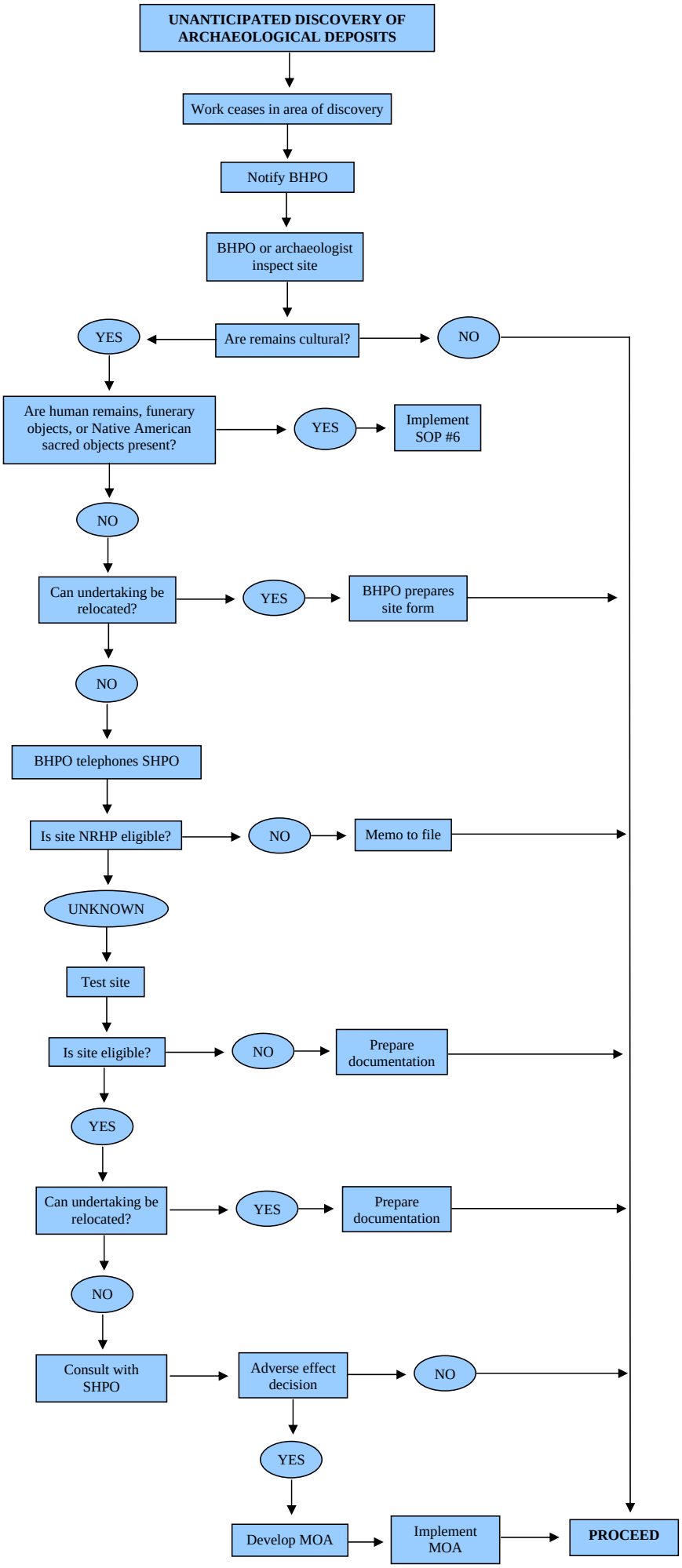
- If disturbance of the deposits is minimal and the excavation can be relocated to avoid the site, the **BHPO** will file appropriate site forms in a routine manner.
- If the excavation cannot be relocated, the **BHPO** shall notify the office of the **SHPO** to report the discovery and to initiate an expedited consultation.

The Section 106 review process is initiated at this point.

- If the deposits are determined to be ineligible for inclusion in the NRHP, then Hill AFB **BHPO** will prepare a memorandum for record and the construction may proceed.
- If the existing information is inadequate for an NRHP eligibility determination, Hill AFB **BHPO** shall develop an emergency testing plan in coordination with the SHPO.

Step 4: Hill AFB shall have qualified personnel conduct test excavations of the deposits to determine NRHP eligibility.

- Hill AFB BHPO, in consultation with the SHPO, will determine appropriate methodology for NRHP eligibility determination.
- If the SHPO and Hill AFB agree that the deposits are ineligible for inclusion in the NRHP, then work on the undertaking may proceed.
- If the deposits appear to be eligible, or Hill AFB and the SHPO cannot agree on the question of eligibility, then Hill AFB shall implement alternative actions, depending on the urgency of the proposed action.
  - Hill AFB may relocate the project to avoid the adverse effect.
  - Hill AFB may request the Keeper of the National Register to provide a determination.
  - Hill AFB may proceed with a data recovery plan under a MOA developed in coordination with the SHPO and possibly the ACHP and interested parties.
  - **Hill AFB may request comments from the ACHP and may develop and implement actions that take into account the effects of the undertaking on the property to the extent feasible and the comments of the SHPO, ACHP, and interested parties. Interim comments must be provided to Hill AFB within 48 hours; final comments must be provided within 30 days.**


UNANTICIPATED DISCOVERY OF ARCHAEOLOGICAL DEPOSITS
Work ceases in area of discovery
Notify BHPO
BHPO or archaeologist inspect site
Are remains cultural?
YES
NO
Are human remains, funerary objects, or Native American sacred objects present?
YES
Implement SOP #6
NO
Can undertaking be relocated?
YES
BHPO prepares site form
NO
BHPO telephones SHPO
Is site NRHP eligible?
NO
Memo to file
UNKNOWN
Test site
Is site eligible?
NO
Prepare documentation
YES
Can undertaking be relocated?
YES
Prepare documentation
NO
Consult with SHPO
Adverse effect decision
NO
YES
Develop MOA
Implement MOA
PROCEED

State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of Heritage and Arts

Julie Fisher
Executive Director

State History

Wilson G. Martin
Director

August 17, 2012

Mr. Robert T. Elliott
Chief, Environmental Management Division
75 CEG/CEV
7274 Wardleigh Road
Hill Air Force Base, Utah 84056-5137

RE: Truck Offload Station at Hill AFB Fuel Tank Farm

For future correspondence, please reference Case No. 12-1564

Dear Mr. Elliott:

The Utah State Historic Preservation Office received your request for our comment on the above-referenced undertaking on August 15, 2012. From the information you provided, it appears that no cultural resources were located in the undertaking's Area of Potential Effects. We concur with your determination of No Historic Properties Affected §36CFR800.4(d)(1) for the undertaking.

This letter serves as our comment on the determinations you have made, within the consultation process specified in §36CFR800.4. If you have questions, please contact me at 801-533-3555 or Jim Dykmann at 801-533-3523.

Sincerely,

Jim Dykmann
Archaeologist
USHPO
for Lori Hunsaker

Lori Hunsaker
Deputy State Historic Preservation Officer
Archaeology

FINDING OF NO SIGNIFICANT IMPACT

1. **NAME OF ACTION:** Proposed Truck Offload Station, Hill Air Force Base (AFB).

2. **DESCRIPTION OF THE PROPOSED ACTION:** Hill AFB proposes to construct a new truck offload station to improve both efficiency and safety of fuel deliveries at the Hill AFB fuel tank farm.

3. **SELECTION CRITERIA:**

The proposed action meets the following criteria:

- improve efficiency of fuel deliveries;
- eliminate current safety hazards;
- ensure the logistics readiness squadron can support future mission requirements; and
- be located in a designated truck offload area at the Hill AFB fuel tank farm in accordance with the Hill AFB general plan.

4. **ALTERNATIVES CONSIDERED:**

Alternative A: No Action

Under the no action alternative, a new truck offload station would not be constructed, and adequate facilities would not be provided.

Alternative B: Proposed Action

The truck offload station would be constructed, to include a state-of-the-art four-header truck offload station with access lanes, a fuel delivery truck stacking area, and a larger turn-around area; and associated fuel storage, containment, valves, meters, piping, pumps, exterior lighting, security features, and connections to adjacent buried utilities.

Alternative C: Improve Existing Facilities

Improving the existing two-header truck offload station would increase the fuel flow rate, but due to spatial limitations, not to the extent necessary to support future mission requirements. None of the other traffic flow, safety, or spill containment concerns would be addressed.

Alternative D: Deliver Fuel by Rail

Railroad access to the Hill AFB fuel tank farm did exist until 2006. At that time the Defense Logistics Agency (DLA) decided to eliminate railroad access and the rail lines were removed.

Alternative E: Deliver Fuel by Pipeline Only

The Hill AFB fuel tank farm receives fuel via an existing privately-owned pipeline and via fuel delivery trucks. DLA contracts with multiple suppliers in different parts of the country. Not all of the suppliers have contractual access to the pipeline, requiring the use of fuel delivery trucks

to supply significant amounts of the required fuel supply. Even if sufficient fuel could be delivered by the pipeline, an efficient truck offload station would be required as a redundant system should the pipeline go out of service for any reason.

5. SUMMARY OF ANTICIPATED ENVIRONMENTAL EFFECTS:

This section only applies to the alternatives considered in detail.

Issue	Alternative A No Action	Alternative B Proposed Action
Air Quality	Air emissions from fuel delivery and storage activities equal 800 pounds of volatile organic compounds (VOCs) per year.	Construction equipment would create temporary emissions. Fugitive dust emissions would be controlled. Air emissions from fuel delivery and storage activities would equal approximately 800 pounds of VOCs per year. Conformity with the Clean Air Act was demonstrated.
Solid and Hazardous Waste	Any fuel not reclaimed is captured for proper disposal.	If contaminated soils are identified, they would be properly handled during the construction process. Operational activities would generate the same types of waste as the existing facility.
Water Quality	If a sheen is present in the containment vault, it is removed and placed in containers for proper disposal. One spill has occurred outside the containment area due to unsafe traffic patterns.	During construction and operations, water quality would be protected by implementing stormwater management practices. Precipitation from the 95th percentile, 24 hour storm event would be retained on site. If a sheen is observed in the containment vault, it would be removed and placed in containers for proper disposal.

6. FINDING OF NO SIGNIFICANT IMPACT: Based on the above considerations, a finding of no significant impact (FONSI) is appropriate for this assessment.

Approved by: _____ Date: 9 Nov 12

HARRY BRIESMASTER III, GS-15, DAF
Director, 75th Civil Engineer Group