Draft

Environmental Assessment of the Defense Logistics Agency's Development Plans and Demilitarization Operations for Sierra Army Depot, California



Prepared for:

Sierra Army Depot, California U.S. Army Tank-automotive and Armaments Command U.S. Army Materiel Command Defense Logistics Agency Disposition Services

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Finding of No Significant Impact for the Environmental Assessment of the Defense Logistics Agency's Development Plans and Demilitarization Operations for Sierra Army Depot, California

1. Introduction. Pursuant to the Council on Environmental Quality (CEQ) regulations in Title 40 of the Code of Federal Regulations (CFR) parts 1500–1508 for implementing the procedural provisions of the National Environmental Policy Act (NEPA) (Title 42 of the United States Code 4321 et seq.) and 32 CFR part 651 (Environmental Analysis of Army Actions), Sierra Army Depot (SIAD) conducted an Environmental Assessment (EA) of the potential environmental and socioeconomic effects associated with implementing the Defense Logistics Agency Disposition Services (DLA-DS) Development Plans and Demilitarization (DEMIL) Operations for SIAD. Regulations in 32 CFR part 651 provide Army guidance and procedures for complying with NEPA and establish policy, procedures, and responsibilities for assessing environmental effects of proposed Army actions. The purpose of the proposed action is to expand the existing DEMIL operations at SIAD to support the Army's divestiture of excess and surplus equipment and save the cost of shipping equipment to another location. Excess assets currently exceed capacity at SIAD and additional vehicle and equipment platforms continue to arrive as part of the retrograde cargo coming back from overseas military operations. As a condition prior to disposal, these assets are required to be demilitarized. DLA-DS supports the Army by providing DEMIL Services through sales contracts. DLA-DS is the proponent for the proposed action, and would be providing the funding and oversight for planning, design, and construction of the project.

2. Proposed Action. The Army and DLA-DS jointly propose to expand the operational capability of the DLA-DS DEMIL facility at SIAD. This proposed action consists of three phases. The expansion will be at a new location on SIAD property and each location was proposed under NEPA and analyzed.

The overall project consists of three phases: Phase I will upgrade the current DLA DEMIL facility to process a wider variety of assets at a faster rate; Phase II is a site selection of property to construct a larger DEMIL facility than the current DLA DEMIL facility for processing even larger amounts of various assets at multiple DEMIL stations; and Phase III will stop production at the current DLA DEMIL facility and convert the area to warehouse storage.

Phase I would include: installation of a new office to support 8 staff; a new 5,000 square foot (SF) warehouse space; a new 150 feet (ft.) by 600 ft. concrete DEMIL pad; and 20,000 square yards (SY) of gravel hardstand for additional open storage.

Phase II construction would include: installation of 24 exterior, pole-mounted, security lights equipped with solar panels; a gravel hardstand (unpaved); new DEMIL support building (3,200 SF); security fencing and gates; truck scales with radiation monitors; scrapyard shelter with divider walls (Jersey barriers); five DEMIL pads (70 ft. by 200 ft.) with steel-plated surface (90 percent of area) and tool storage sheds (40 ft. by 60 ft.); and a non-organizational privately owned vehicle (POV) parking area (paved).

Phase III, general improvements to the former DLA-DS site would include: installing a hardstand on the northern portion of the site; raising overhead electrical power lines **status**; installing a scrapyard shelter (120 SF) with Jersey barriers; and constructing a general purpose warehouse (approximately 80,000 SF).

3. Alternatives Sites Considered. The Army has identified the following three alternative sites as well as a no action alternative in accordance with CEQ regulations:

- 1. Alternative 1: Location D is a 46.7 acre parcel known as the TS22/TS23 facility and is adjacent to the Long Term Storage (LTS) facility;
- 2. Alternative 2: Location B is a 275 acre parcel that is south of the LTS facility;
- 3. Alternative 3: Location A is a 12.1 acre parcel that is adjacent to the LTS facility; and
- 4. No Action Alternative.

4. Factors Considered in the Finding of No Significant Impact. The EA, which is attached and incorporated by reference into this Finding of No Significant Impact (FNSI), examines the potential effects of the action alternatives and the no action alternative on the following resource areas of environmental and socioeconomic concern: groundwater resources and quality; biological resources; cultural resources; utilities; hazardous and toxic substances; traffic and transportation; and noise. No mitigation measures would be necessary; however, best management practices (BMPs) for reduction of potential effects to water quality, traffic and transportation, and noise generation would be implemented during construction and operation of the proposed action.

5. Public Review and Comment. The Draft EA and FNSI were made available for public review and comments for 30 days, from [insert dates], beginning with publication of a notice of availability (NOA) in the Reno Gazette Journal and Lassen County Times newspapers. Documents were made available at the Herlong, Lassen County Public and Washoe County Main libraries. All documents are posted on SIAD's website, https://www.sierra.army.mil/. Comments received within the 30-day public review period have been made part of the Administrative Record, and revisions have been made as appropriate to the EA and FNSI based on the comments received.

6. Conclusions. On the basis of the EA, SIAD has determined that implementing the proposed action at any of the three locations considered would have no significant direct, indirect, or cumulative adverse effects on the quality of human life or the natural environment at SIAD. Preparation of an Environmental Impact Statement (EIS) is not required before implementing the proposed action.

BENJAMIN G. JOHNSON LTC, LG Commanding Sierra Army Depot, California Date

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TABLE OF CONTENTS

Purp	pose and Need for the Proposed Action	
1.1	Introduction	1-1
1.2	Purpose and Need for the Proposed Action	1-2
1.3	Decision to be Made	1-6
1.4	Regulatory Compliance	1-6
1.5	Public Participation	1-7
Des	scription of the Proposed Action and Alternatives	
2.1	Proposed Action	
2.2	Screening Criteria	
2.3	Alternatives Eliminated From Further Consideration	
2.4 Aff		
3.1	Areas Not Carried Forward for Detailed Analysis	
3.2	Areas Carried Forward for Detailed Analysis	
3.2.1	Groundwater	
3.2.2	Biological Resources	
3.2.3	Cultural Resources	
3.2.4	Utilities	
3.2.5	Hazardous and Toxic Substances	
3.2.6	Traffic and Transportation	
3.2.7	Noise	
Ref Age	erences encies and Persons Consulted	5-1 6-1
	1	
	1.1 1.2 1.3 1.4 1.5 Des 2.1 2.2 2.3 2.4 Aff 3.1 3.2 3.2.1 3.2.2 3.2.3 3.2.4 3.2.5 3.2.6 3.2.7 Con Ref Age List	 Purpose and Need for the Proposed Action. Decision to be Made Regulatory Compliance Regulatory Compliance Public Participation. Description of the Proposed Action and Alternatives. Proposed Action. Screening Criteria Alternatives Eliminated From Further Consideration Alternatives Considered. Affected Environment and Environmental Consequences A reas Not Carried Forward for Detailed Analysis Areas Carried Forward for Detailed Analysis Cultural Resources Cultural Resources Traffic and Transportation

LIST OF TABLES

Table 2-1.	Screening Criteria	.2-3
Table 4-1.	Summary of Potential Environmental Effects for Each Alternative	.4-2

LIST OF FIGURES

Figure 1-1.	Sierra Army Depot Location	1-3
Figure 1-2.	Sierra Army Depot Site Map	1-4
Figure 1-3.	Existing DLA-DS Site of Sierra Army Depot	1-5
	DEMIL Satellite Locations and Existing DLA Operations	
Figure 2-2.	Alternative Location D on SIAD parcels TS22 and TS23	
Figure 2-3.	Alternative Locations A and B south of the Long Term Storage facilities	
Figure 3-1.	SIAD Surface Water Features	
Figure 3-2.	Locations of IRPs and MMRPs on the SIAD installation	3-18
Figure 3-3.	Access Roads to and from the three alternative locations (A, B and D)	3-22

ACRONYMS AND ABBREVIATIONS

BGEPA	Bald and Golden Eagle Protection Act
BMP	Best Management Practice
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CH4	methane
CO	carbon monoxide
CO2	carbon dioxide
dB	decibel
dBA	A-weighted decibels
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
DCOS	Demilitarization as a Condition of Sale
DEMIL	Demilitarization
DLA	Defense Logistics Agency
DoD	Department of Defense
DLA-DS	Defense Logistics Agency – Disposition Services
DoDM	Department of Defense manual
DRMO	Defense Reutilization and Marketing Office
EA	Environmental Assessment
EIS	Environmental Impact Statement
FNSI	Finding of No Significant Impact
GHG	greenhouse gasses
INRMP	
	Integrated Natural Resources Management Plan
IRP	Installation Restoration Program
LTS	long term storage
MBTA	Migratory Bird Treaty Act
MMRP	Military Munitions Response Program
N2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO2	nitrogen dioxide
NOI	Notice of Intent
O3	ozone
PM 2.5	Particulate Matter 2.5 micrometers or less in diameter
PM 10	Particulate Patter 10 micrometers or less in diameter
POV	Privately Owned Vehicle
RCRA	Resource Conservation and Recovery Act
SF	square-foot
SIAD	Sierra Army Depot
SO2	sulfur dioxide
SOP	Standard Operating Procedure
USC	United States Code
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service

SECTION 1.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 INTRODUCTION

This environmental assessment (EA) evaluates the environmental and socioeconomic effects of establishing a demilitarization (DEMIL) center and carrying out DEMIL operations at the Sierra Army Depot (SIAD), California. This EA has been prepared in accordance with Title 42 of the United States Code (U.S.C.) sections 4321-4347, the National Environmental Policy Act (NEPA); Title 40 of the Code of Federal Regulations (CFR) parts 1500-1508, Regulations for Implementing the Procedural Provisions of NEPA; and 32 CFR part 651, Environmental Analysis of Army Actions.

SIAD is under the command structure of the U.S. Army Tank-automotive and Armaments Command (TACOM), which is subordinate to the U.S. Army Materiel Command (AMC). It was established in 1942 and is located in Lassen County, California. The eastern boundary of SIAD is 4 miles from the California-Nevada state line (Figure 1-1). SIAD covers a land area of about 36,000 acres and consists of four sites: the main parcel, the airfield, the demolition ground, and a gravel extraction area (Figure 1-2). SIAD's mission is to provide rapid, expeditionary logistics support and long-term sustainment solutions to enhance readiness for the Total Army and Joint Force (SIAD 2017). Military assets are staged at SIAD. SIAD stores thousands of vehicles and is required by law to utilize the Defense Logistics Agency (DLA) for the disposal of unneeded or unusable equipment.

DLA is the Department of Defense's (DOD) logistics combat support agency, providing worldwide logistics support in both peacetime and wartime to the military services as well as several civilian agencies and foreign countries. DLA currently operates a site on SIAD where it conducts disposal activities (Figure 1-3). DLA's Controlled Property/DEMIL Division is responsible for validation, accountability and distribution of DEMIL policy and special processing procedures throughout DLA Disposition Services. Most military unique vehicles and equipment have mandatory DEMIL requirements prior to disposal. DEMIL eliminates the functional capabilities and inherent military design features. Prior to DEMIL, hazardous substances such as gasoline, diesel, motor oil, transmission and brake fluids, etc., are drained, air conditioner and fire control devices are purged or removed, and batteries are removed. These materials are then recycled or properly disposed of. DEMIL methods and degree range from removal and destruction of critical features to total destruction by cutting, crushing, shredding, melting, burning, etc. DEMIL is required to prevent property from being used for its originally intended purpose and to prevent the release of inherent design information that could be used against the United States. DEMIL applies to material in both serviceable and unserviceable condition.

1.2 PURPOSE AND NEED FOR THE PROPOSED ACTION

DLA proposes to expand DEMIL operations at SIAD to meet current disposal requirements. Excess assets currently exceed capacity at SIAD and additional vehicle and equipment platforms continue to arrive As a condition prior to disposal, these assets are required to be demilitarized.

The DEMIL facility at SAID was built to accommodate a very limited number of assets assets. It is not adequate to DEMIL larger assets additional space and infrastructure to accommodate the size and quantity of assets in current need of DEMIL.

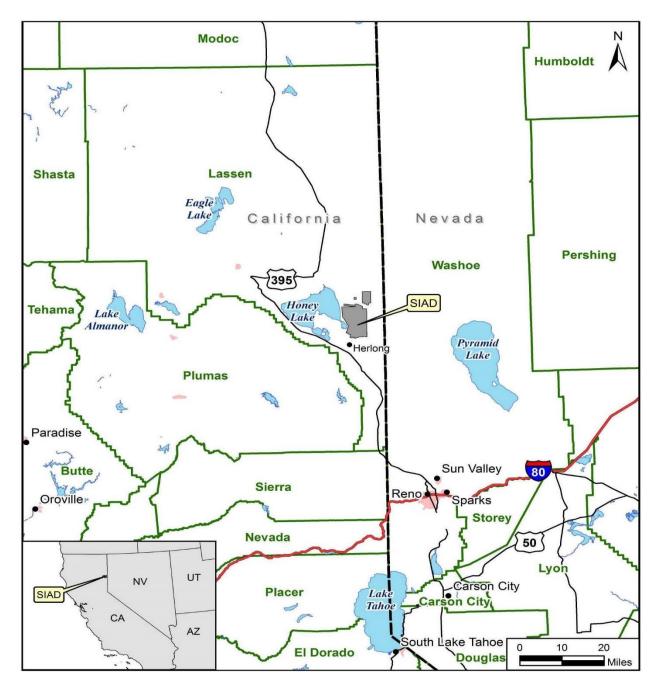


Figure 1-1. Sierra Army Depot Location

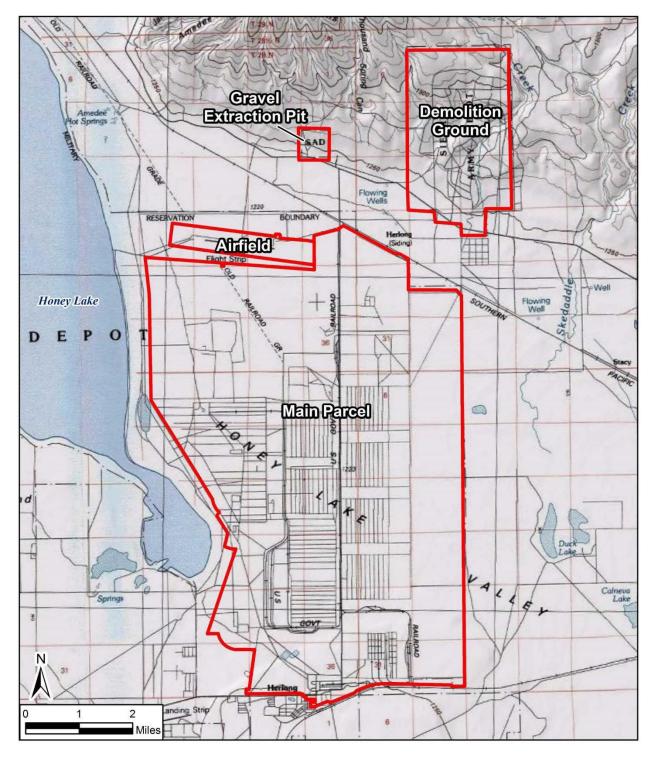


Figure 1-2. Sierra Army Depot Site Map



Figure 1-3. Existing DLA-DS Site of Sierra Army Depot

Sierra Army Depot, California

1.3 DECISION TO BE MADE

The SIAD Commander must decide whether the environmental or socioeconomic effects of the selected alternative that best meets the purpose and need for the proposed action would support a finding of no significant impact (FNSI) or would require publishing in the *Federal Register* a notice of intent (NOI) to prepare an environmental impact statement (EIS). Publication of an NOI would be necessary if the potential adverse environmental impacts associated with the selected alternative would remain significant even after implementation of reasonable mitigation measures.

1.4 REGULATORY COMPLIANCE

NEPA requires that Federal Agencies consider the environmental consequences of proposed actions during the decision-making process. The intent of NEPA is to protect, restore, and enhance the environment through well-informed decision-making. The Council on Environmental Quality (CEQ) was established under NEPA to implement and oversee Federal Policy in that process. To this end, the CEQ issued regulations to implement the procedural provision of NEPA (40 CFR parts 1500–1508). The U.S. Army has supplemented CEQ NEPA regulations by promulgating its own NEPA-implementing regulations (32 CFR part 651).

The regulations in 32 CFR part 651 provide Army guidance and procedures for complying with NEPA and establish policy, procedures, and responsibilities for assessing environmental effects of Army actions. According to 32 CFR 651.10(c), projects involving facilities construction requires environmental impact analysis under NEPA. Consistent with this Army regulation, this EA assesses the environmental and socioeconomic impacts of implementing this SIAD DEMIL operation.

Applicable federal and state regulations were considered for this EA analysis of the proposed action's effects on environmental and socioeconomic resources. The following legislation was given particular consideration:

- Archaeological Resources Protection Act (16 U.S.C. 470aa 470mm)
- Bald and Golden Eagle Protection Act (16 U.S.C. 668–668d)
- Clean Air Act (42 U.S.C. 7401 *et seq.*)
- Clean Water Act (33 U.S.C. 1251 *et seq.*)
- Endangered Species Act (16 U.S.C. 1531 et seq.)
- Migratory Bird Treaty Act (16 U.S.C. 703-712)
- National Historic Preservation Act (54 U.S.C. 300101 *et seq.*)
- Resource Conservation and Recovery Act (42 U.S.C. 6901 *et seq.*)
- Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9601 *et seq.*)

1.5 PUBLIC PARTICIPATION

Public involvement in the EA process is conducted in accordance with NEPA, and CEQ and Army implementing regulations. This EA, along with a draft FNSI, should one be supported by the environmental impact analysis, will be available to the public for review for 30 days. A notice of availability of the EA and draft FNSI will be published in the *Reno Gazette Journal* newspaper. At the end of the 30-day public review period, the Army will consider any comments submitted by individuals, agencies, or organizations on the EA and the draft FNSI. As appropriate, the Army will then either execute a final FNSI and proceed with implementing the proposed action, or publish an NOI to prepare an EIS.

Consideration of the views and information of all interested parties promotes open communication and enables more-informed decision-making. Agencies, organizations, and members of the public having a potential interest in the proposed action—including Native American groups, minority, low-income, and disadvantaged persons—can participate in the decision-making process through public review of the EA and FNSI.

The U.S. Fish and Wildlife Service (USFWS) and California state natural and cultural resources agencies were contacted at the outset of this EA concerning the proposed action. Letters sent and responses received are provided in the appendices.

SECTION 2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

The proposed action is the expansion of the operational capability of the DLA DEMIL facility at SIAD. This proposed action consists of three phases, as further discussed.

Phase I would upgrade the existing DLA location to make it a full-service center. Phase I would include installation of a new office to support 8 staff, a new 5,000 square foot (SF) warehouse space, specialized equipment, a new 150 feet (ft.) by 600 ft. concrete DEMIL pad and 20,000 square yards (SY) of gravel hardstand for additional open storage to support an expanded DEMIL operation at the existing DLA DS site.

Phase II would be the construction and operation of a new satellite DEMIL facility capable of handling the largest DEMIL assets such as tanks. DEMIL operations utilizing these facilities would extend through 2043. Phase II construction would include: installation of 24 exterior, pole-mounted, security lights equipped with solar panels; a gravel hardstand (unpaved); new DEMIL support building (3,200 SF); security fencing and gates; truck scales with xyz (RAD) monitors; scrapyard shelter with divider walls (Jersey Barriers); five DEMIL pads (70 ft. by 200 ft.) with steel-plated surface (90 percent of area) and tool storage sheds (40 ft. by 60 ft.); and a non-organizational POV parking area (paved).

Phase III would follow the completion of Phase II, at which time all DEMIL operations would transition to the new satellite DEMIL facility. The current DLA Disposition site would then be transitioned to warehouse operations, with the DEMIL pad being repurposed to open storage. General improvements to the existing site would include: installing hardstand on the north of the site; raising overhead electrical power lines **EXECUTE** installing a scrapyard shelter (120 SF) with Jersey barriers; and removing the existing DEMIL pad and constructing a general purpose warehouse (approximately 80,000 SF) on that location. Construction of upgrades and new facilities are proposed to begin in April 2020 with a projected one year completion of each phase.

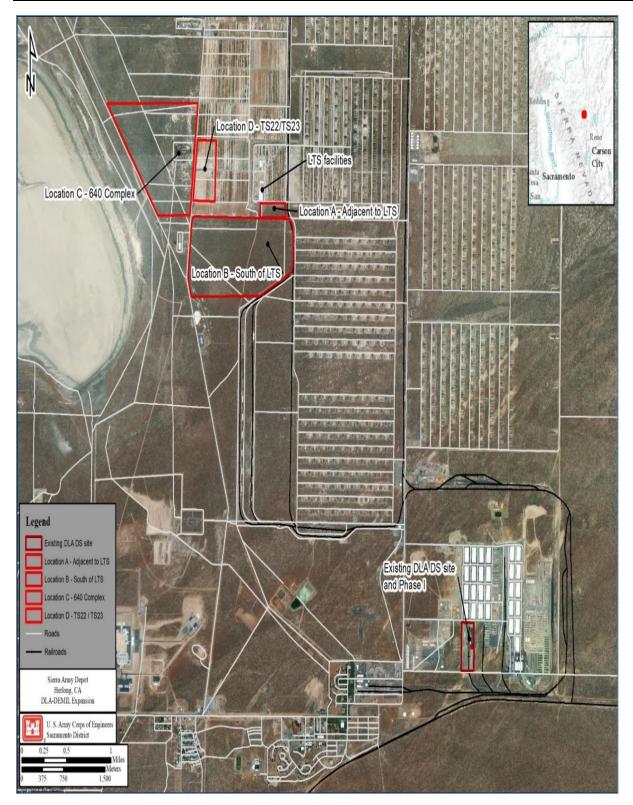


Figure 2-1. DEMIL Satellite Locations and Existing DLA Operations

Sierra Army Depot, California

2.2 SCREENING CRITERIA

Screening Criteria (Table 2-1) were developed to further identify only reasonable alternatives to achieve the purpose and need for the proposed action. For an alternative to be considered reasonable and carried forward for further analysis, it must meet the purpose of, and need for, the proposed action as well as satisfy the following screening criteria:

Existing Utilities	Located in close proximity (approximately one (1) mile) to existing utilities (electric, water, and natural gas)
No Known or Suspected Contamination	Location should not have any known of suspected contamination that could prevent or delay the project

Table 2-1 SCREENING CRITERIA

2.3 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

After application of the screening criteria referenced in Paragraph 2.2 above, constructing the new satellite DEMIL Facility at Location C has been eliminated as potential alternative from further consideration because it has known ground contamination.

2.4 ALTERNATIVES CONSIDERED

2.4.1 Alternative 1, Location D - TS22/TS23 (xyz-acre parcel). Location D is the *preferred alternative* to begin expanding DEMIL capacity at SIAD. Location D meets the screening criteria, because there are already hundreds of DEMIL prepped vehicles located on these parcels, so transportation to the DEMIL site would be negligible. It meets the other screening criteria for utilities availability and has existing roadways to support access and construction - with road access to available rail network. This area is already highly disturbed and will not require any tree removal (Figure 2-2).

2.4.2 Alternative 2, Location B - South of LTS (275-acre parcel). Location B meets the screening criteria for utilities availability, has existing roadways and rail to support access and construction, and is in close proximity to where DEMIL prepped vehicles are currently stored. It provides DLA-DS with the ability for potential growth of their DEMIL capacity to meet projected future needs. This area is already highly disturbed and will not require any tree removal (Figure 2-3).

2.4.3 Alternative 3, Location A - Adjacent to LTS (12.1-acre parcel). Location A meets the screening criteria for utilities availability, has existing roadways to support access and construction. It is in close proximity to where DEMIL prepped vehicles are stored. This area is already highly disturbed and will not require any tree removal (Figure 2-3).

2.4.4 No Action Alternative

CEQ regulations require analysis of a no action alternative to provide a benchmark, enabling decision makers to compare the magnitude of the potential environmental effects caused by the proposed action and any alternative actions. The no action alternative is not required to be reasonable or to meet the purpose and need of the proposed action. This EA refers to the no action alternative as the existing (baseline) conditions of the affected environment without implementing the proposed action.

Under the no action alternative, an expansion of the existing DEMIL facilities and operations at SIAD would not be implemented. SIAD currently supports some minor DEMIL activities utilizing an existing hardstand (i.e., concrete pad), warehouses, and office buildings already on the installation. However, the existing facilities do not have the capacity and specialized equipment necessary to demilitarize the volume and type of DOD property scheduled to be staged at SIAD over the next 20 to 25 years.

Given the duration and nature of the anticipated demilitarization mission proposed for SIAD, the no action alternative will not achieve the purpose and need of the proposed action.

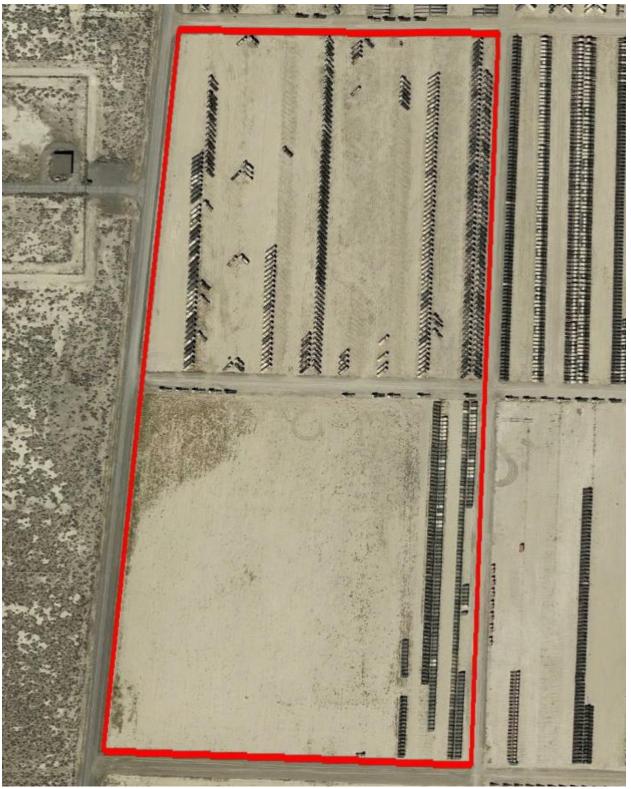


Figure 2-1. Alternative Location D on SIAD parcels TS22 and TS23

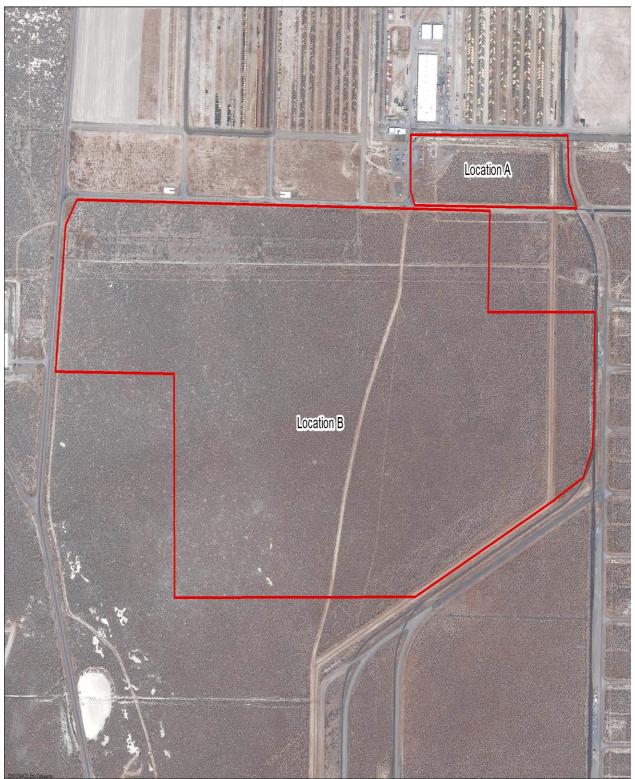


Figure 2-2. Alternative Locations A and B south of the Long Term Storage facilities

SECTION 3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This EA addresses environmental, cultural, and socioeconomic effects associated with the expansion of DEMIL operations.

Effects on each resource can vary in degree or magnitude from a slightly noticeable change to a total change in the environment. For the purpose of this analysis, the intensity of effects will be classified as no effect, negligible, minor, moderate, significant, or beneficial. The intensity thresholds are defined as follows:

- **No Effect:** A resource would not be affected by the action being evaluated when compared to the forecasted future without project condition.
- **Negligible:** A resource would not be affected or the effects would be at or below the level of detection, and changes would not result in any measurable or perceptible consequences when compared to the forecasted future without project condition.
- **Minor:** Effects on a resource would be detectable, although the effects would be localized, small, and of little consequence to the sustainability of the resource when compared to the forecasted future without project condition. Mitigation measures, if needed to offset adverse effects, would be simple and achievable.
- **Moderate:** Effects on a resource would be readily detectable, long-term, localized, and measurable when compared to the forecasted future without project condition. Mitigation measures, if needed to offset adverse effects, would be extensive and likely achievable.
- **Significant:** Effects on a resource would be obvious, long-term, and would have substantial consequences on a regional scale when compared to the forecasted future without project condition. Extensive mitigation measures to offset the adverse effects would be required and success of the mitigation measures would not be guaranteed.
- **Beneficial:** Effects on a resource would be beneficial when compared to the forecasted future without project condition.

The CEQ defines *cumulative effects* as the: "… impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions" (40 CFR § 1508.7). A discussion of cumulative effects is included for each resource evaluated.

3.1 AREAS NOT CARRIED FORWARD FOR DETAILED ANALYSIS

Per the CEQ regulations (40 CFR § 1500), Federal Agencies may focus their NEPA analysis on resource areas that could be affected by a proposed action and omit discussing resource areas that would not be affected (see 32 CFR § 651.34[e]). SIAD has reviewed all the resource areas that could potentially be affected by implementing the proposed action and determined that the proposed action either would have no effects or negligible effects on the following resources: Aesthetic and Visual Resources; Socioeconomics; Geology and Soils; Land Use; Surface Water Resources; and Air Quality as explained below.

3.1.1 Aesthetic and Visual Resources

Implementing the proposed action would not adversely affect aesthetic or visual resources, as implementing the DEMIL would not adversely alter the area's visual character or scenic quality and would not block or disrupt existing views. Facilities would be confined within SIAD and not visible from areas outside the installation.

3.1.2 Socioeconomics

Implementing the proposed action would not adversely affect socioeconomics (e.g., population, economic activity, and environmental justice). Implementation of the DEMIL would not cause changes in population, local employment levels, personal income, or regional industrial or commercial growth. It would not result in disproportionate adverse environmental or health effects on low-income or minority populations or children. Implementation of the DEMIL is not an action with the potential to substantially affect human health or the environment by excluding anyone, denying anyone's benefits, or subjecting anyone to discrimination or disproportionately high and adverse environmental health or safety risks.

3.1.3 Geology and Soils

Construction and operation of the proposed project are expected to have negligible effects on current soil and geology conditions. Ground disturbance for all action alternatives would be minimal and would occur in areas of the installation that have already been previously highly disturbed. Best management practices (BMPs) to be implemented during construction, such as regular watering of disturbed ground, would minimize soil erosion.

3.1.4 Land Use

SIAD occupies approximately 36,000 acres in Herlong, California, located in Lassen County just east of the Sierra Nevada Mountains in the northeast portion of California near the Nevada border. Currently, the DLA-DS site occupies 24 acres on SIAD, all in one location in the southeast portion of the Warehouse District. The existing DLA-DS site consists of an administrative building, a storage building, a warehouse, a vehicle scale, a paved POV parking lot, a to-acre paved open storage area, a concrete pad, and 22 acres of unimproved storage area. Perimeter fencing surrounds the facilities, with the exception of the parking lot.

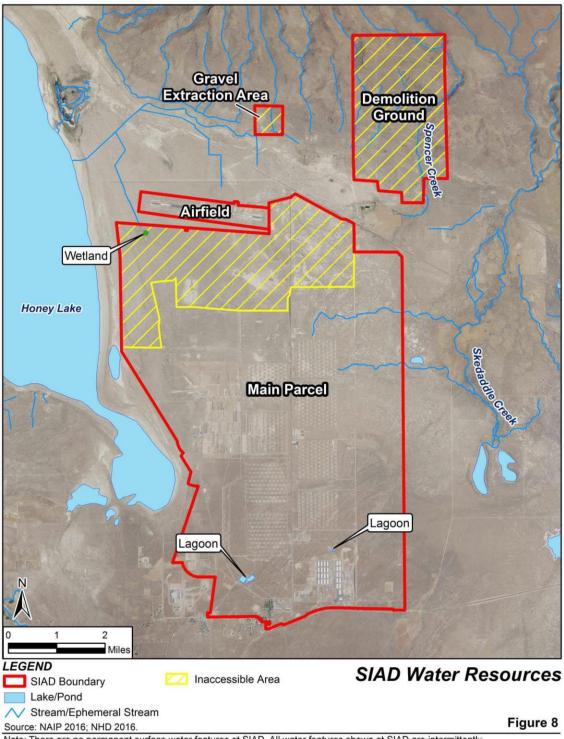
Under the current Land Use Control Implementation Plan (USACE 2016), the land use designations at the current DLA-DS DEMIL site and Location D are classified as Open Storage, while Locations A and B are undesignated, since no improvements have been made to these locations (Carol Gordon, SIAD RPAO *pers. com.* 2018).

Under Phase I, expansion of the existing DEMIL facility and operations at the current DLA-DS site would remain the same as it is already being used for DEMIL operations. Under Phase III of the project, the existing DLA-DS location would be converted back to warehouse storage. Although DEMIL operations at this location would end or have very limited DEMIL use, there would be no effect to the overall land use designation of Open Storage or Industrial.

Although land use designations for Locations A and B would change to Open Storage or Industrial if either of those sites were selected, DEMIL operations would be consistent with the current land use and natural resource management plans established for SIAD.

3.1.5 Surface Water Resources

SIAD has no permanent surface waterbodies (Tetra Tech, 2018). One small wetland is located in the northwestern portion of SIAD's main parcel and several ephemeral streams are found on the demolition ground. The main parcel and airfield also have multiple playas, or undrained desert basins that may become inundated following rain but dry out quickly. SIAD's surface water features are shown in Figure 3-1. There are no surface water resources within or in the vicinity of the proposed project or alternative project areas, therefore, the proposed action would have no effects on surface water resources.



Note: There are no permanent surface water features at SIAD. All water features shown at SIAD are intermittently inundated but otherwise dry.

Figure 3-1. SIAD Surface Water Features

3.1.6 Air Quality

Federal and most State Agencies segregate air sheds by county boundaries. In Lassen County, the state of California has classified the air quality as Attainment for PM2.5, PM10, NO2, SO2, O3 8-hour, CO, and lead. Lassen County is an attainment area for all criteria pollutants. SIAD's emissions are well within the limitations of their current air quality permit

3.2 AREAS CARRIED FORWARD FOR DETAILED ANALYSIS

This Section focuses its NEPA analysis on those resource areas that could be affected by the Proposed Action and Alternatives, they include: Groundwater; Cultural Resources; Natural Resources; Hazardous and Toxic Substances; Existing Contaminated Areas regulated under the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Traffic and Transportation; and Noise.

3.2.1 GROUNDWATER

3.2.1.1 Affected Environment

SIAD is located in the Honey Lake Valley groundwater basin, a 487-square-mile basin that stores an estimated 10 million acre-feet of water in the upper 100 feet of its aquifers. Groundwater quality varies and some groundwater in the basin is not suitable for drinking water because of high levels of dissolved solids, sulfate, or other impairments (Tetra Tech 2018).

Groundwater flow typically follows the surface topography; however, localized and temporal variations may exist. Groundwater flow is generally to the northwest in the southern portion of the main parcel, and generally to the southwest in the northern portion of the main parcel. In much of the central and western portions of the Main Depot, the hydraulic gradient is relatively flat and flow appears to be to the west. Local variations in the potentiometric surface also occur in the vicinity of (1) industrial areas where leaks in the water supply and sewage systems cause mounding, and (2) the potable supply wells located in the southern portion of the Main Depot. These wells cause seasonal variations in groundwater flow because of differing water usage requirements during the wet and dry seasons (Tetra Tech 2018). At the demolition ground and gravel extraction area, groundwater flow is generally to the south toward lower elevations.

Holocene sedimentary deposits, Pleistocene lake and near-shore deposits, and Pleistocene and Plio-Pleistocene volcanic rocks comprise the Honey Lake Valley groundwater basin aquifer system. These deposits range from low-to-high permeability and yield low-to-high amounts of water (Tetra Tech 2018).

The major sources of groundwater recharge are direct infiltration of precipitation in upland areas and infiltration of streamflow in alluvial-fan areas, accounting for approximately 80 percent of total recharge. The remaining 20 percent of recharge consists of infiltration of surface water and irrigation flow on the valley floor (Tetra Tech 2018).

SIAD has on-depot groundwater wells and withdraws water to support drinking, irrigation, dust suppression, and industrial purposes. SIAD has three operational groundwater wells producing potable water that range in depth from approximately 350 to 500 feet and have an average static depth of 105 to 121 feet below ground surface. The wells currently undergo treatment for uranium, manganese and iron removal because the untreated levels exceed the primary drinking water levels. Recently, one of the wells was identified as having *per- and poly-fluoroakyl substances* or "*PFAS*" above the Health Advisory and additional treatment measures are being added to address those concerns. Groundwater also has elevated nitrate levels that appear to be caused by natural background levels. Construction and operations activities within the scope of this project are expected to have negligible to no effect on groundwater due to physical controls to eliminate any discharge or runoff that would impact groundwater.

Other areas of groundwater contamination exist at SIAD and are being addressed by the depot's Installation Restoration Program (IRP) with regulatory oversight by the California Department of Toxic Substances Control (Tetra Tech 2018). Within the project area being evaluated in this EA, the existing DLA-DS site has a hydrocarbon plume that is monitored through wells; however, the water delivery remains unrestricted and uncontaminated.

3.2.1.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, current effects to water resources from ongoing activities would persist within the installation, as identified in SIAD's Final Integrated Natural Resources Management Plan 2018-2023 (Tetra Tech 2018). SIAD's current operational effects on water resources include using groundwater for drinking water, irrigation, and other mission activities; generating and treating wastewater on-depot; using equipment washracks; and managing stormwater runoff. No new DEMIL development activities would occur and there would be no additional adverse effects to groundwater or surface water resources or quality.

Alternative 1, Location D - TS22/TS23 parcel (Preferred Alternative)

Phase 1 and III (Phase 1, Upgrade existing DLA site to full-service DEMIL operation and Phase III, Relocate DEMIL operations to satellite location) Construction and Operations

Water usage during Phase I would likely increase at the current DLA-DS site due to construction activities and the increase of DEMIL operations following completion of the additional concrete pad. The increase in water use from dust control activities during construction would be temporary and of a minor amount. Phase I DEMIL operations at the current DLA-DS site would not be expected to substantially increase from existing consumption rates, even with the modest increase in DLA-DS staffing.

Accidental spills of hazardous materials during Phase I construction and DEMIL operations at the existing DLA-DS site could have an adverse effect on groundwater quality; design and handling practices and compliance with the installations Spill Plans prevent or minimize

potential adverse effects from spills or releases. In addition, the design of the concrete DEMIL pad includes a concrete berm and a gravel apron around the perimeter that provides a barrier to the ground surface. Finally, the Contractor generating scrap on the pad would be required to clean up any hazardous materials and spills on the work pad on a daily basis. In summary, effects to water resources from Phase I activities at the current DLA-DS site would be negligible.

Following completion of Phase II construction, the transition of DEMIL facilities at the current DLA-DS site to warehouse construction and operations during Phase III would be expected to have similar effects to water resources as Phase I. Although warehouse operations also have the potential for the occurrence of accidental hazardous material spills, the likelihood of spills is expected to be much reduced compared to DEMIL operations. Ending DEMIL activities at the former DLA-DS site would reduce the potential for effects to groundwater quality at that location. Overall, effects to water resources from Phase III activities at the current/former DLA-DS site would be negligible.

Phase II (Construct new satellite DEMIL facility) Construction and Operations

Phase II construction activities would likely increase water usage from dust control activities at Location D. As with Phase I construction, the increased use of water during Phase II construction would be temporary and of a minor amount. It is expected that DLA-DS staffing sizes would be similar to staffing at the current DLA-DS site during Phase I operations; therefore, water consumption rates would be expected to be similar for Phase II operations. Based on the water supplies at SIAD, these increases are anticipated to be minor and not expected to place a burden on the overall water quality and supply. Location D would use water via connection to the LTS facility that has unrestricted use and uncontaminated supply.

Accidental spills of hazardous materials during Phase II construction and DEMIL operations could have an adverse effect on groundwater quality; however, BMPs identified in Section 3.2.3 Mitigation below would be implemented to reduce the potential for adverse effects from spills. As discussed in Phase I, the concrete pads would also include concrete berms and gravel aprons around their perimeters, and the Contractor generating scrap on the pads would be required to clean up any contaminants on the work pad on a daily basis, which would prevent any hazardous materials from potentially entering the groundwater. The preferred alternative is not located in or around any surface waters and negligible effects to water quality are anticipated. The containment protocol and BMPs were discussed with staff at the Lahonton Regional Water Quality Control Board and they concurred that the possibility of contamination of water resources from accidental spills from Phase II construction and operations would be low (Lahonton Regional Water Quality Control Board, R. Tucker pers. comm, 2018). Overall, effects to groundwater resources from construction and operation of Phase II at Location D would be negligible.

Alternative 2, Location B – South of LTS (275-acre parcel)

Groundwater resource effects would the same as Alternative 1. Location B would also use water via connection to the LTS facility that has unrestricted use and uncontaminated supply.

Alternative 3, Location A – Adjacent to LTS (12.1-acre parcel)

Groundwater resource effects would be the same as Alternative 1 and 2. Location A would use water via connection to the LTS facility that has unrestricted use and uncontaminated supply.

3.2.1.3 Cumulative Effects

No large-scale projects or proposals at SIAD have been identified that, when combined with the proposed project, would contribute significantly to significant adverse effects on water resources. The current operations at the nearby LTS facility involve storage of DoD equipment that may have residual amounts of oils or hydraulic fluids left from the draining process prior to their shipment to SIAD. Amounts were found around some of the assets and were deemed negligible and not having the potential to leach into and contaminate the groundwater. The increase in demand on water supply for DEMIL activities would not have significant effects on surface and groundwater supplies. Cumulative effects to water resources are anticipated to be negligible.

3.2.1.4 Mitigation

The BMPs for construction and operations would include measures to prevent spills and possible contamination of surface and ground waters. These would involve proper storage of fuels in fueling stations that are far from water resources. Contractors carrying out DEMIL operations would be required to follow spill prevention, containment, and countermeasure plans approved by SIAD and DLA-DS. Secondary containment around the DEMIL pads would contain any spills or leaks and would be cleaned following the processing of each asset. DEMIL-related construction and operation would not occur during adverse weather conditions and the construction contractor would be required to install appropriate stormwater pollution prevention measures prior to rain events.

3.2.2 BIOLOGICAL RESOURCES

3.2.2.1 Affected Environment

Flora

Ninety plant species typical of those found in the semiarid Honey Lake Valley have been observed on SIAD (Tetra Tech 2018). They form six vegetation communities—four shrubland communities and two grassland communities. Developed and disturbed areas have little or no vegetation. Most acreage at SIAD is shrublands. Big sagebrush (*Artemisia tridentata*) is the most common shrubland community with 11,125 acres. Greasewood (*Sacrobatus vermiculatus*) and shadscale (*Atriplex confertifolia*) scrub cover 7,871 acres and 7,255 acres, respectively. Rubber rabbitbrush (*Ericameria nauseosa*) covers only 357 acres. Cheatgrass (*Bromus tectorum*) grassland is the most common grassland vegetation community at 1,550 acres. Cheatgrass is a nonnative species. It typically occupies previously cleared or disturbed areas such as road margins, around the airstrip, and in areas that have been previously cleared or

mowed. Cheatgrass outcompetes and displaces native vegetation; reducing the presence of native species at SIAD over time, and can result in increased frequency and extent of wildfires.

In general, the native vegetative communities at SIAD are healthy. Species diversity is in line with what would be expected in SIAD's arid climate. Trees at SIAD are limited to the cantonment area, where they were planted to enhance the landscaping. Because of the limited amount of precipitation at SIAD, disturbed areas revegetate slowly. If not actively revegetated with native species, those areas are dominated by fast-growing invasive species such as cheatgrass or remain bare and subject to erosion.

Greasewood and big sagebrush are predominant in all the alternative locations, with sparse intermittent pockets of the other mentioned species.

Fauna

Mammals. 25 mammal species have been observed on SIAD (Tetra Tech 2018). Common mammal species are black-tailed jack rabbit (*Lepus californicus*), cottontail rabbit (*Sylvilagus* sp.), coyote (*Canis latrans*), ground squirrel (*Spermophilus lateralis*), kangaroo rats (*Dipodomys* sp.), mule deer (*Odocoileus hemionus*), and pronghorn antelope (*Antilocapra americana*). Four species of bats have been observed on SIAD: big brown bat (*Eptesicus fuscus*), Yuma myotis (*Myotis yumanensis*), hoary bat (*Lasiurus cinereus*), and silver-haired bat (*Lasionycteris noctivagans*).

Birds. More than 60 bird species have been observed on SIAD (Tetra Tech 2018). Common bird species include the black-billed magpie (*Pica hudsonia*), common raven (*Corvus corax*), and white-crowned sparrow (*Zonotrichia leucophrys*). Overall, habitat quality for birds at SIAD is medium to low; however, habitat quality is high for shrubland species. Some microhabitats occur at SIAD, including large ornamental trees such as Siberian elm and western sycamore located in the cantonment area that are suitable for raptor perching and nesting. Raptors have been observed perching or nesting in trees in the cantonment area, and perching on poles throughout the facility.

Reptiles and Amphibians. Eight reptile and amphibian species are known to occur on SIAD (Tetra Tech 2018). Common reptiles on SIAD are the desert horned lizard (*Phrynosoma platyrhinos*), Great Basin fence lizard (*Sceloporus occidentalis biseriatus*), Great Basin gopher snake (*Pituophus catenifer*), and long-nosed leopard lizard (*Gambelia wislizenii*). The only amphibian species common on SIAD is the pacific chorus frog (*Pseudacris regilla*).

Insects. There is potential habitat for the Carson Wandering Skipper (*Pseudocopaeodes eunus obscurus*) located to the north and south of the installation. Cicadas (*Okanagana* sp.) are abundant along the SIAD western boundary fence near Chewing Gum Road. Bee flies (*Bombyliidae*), true flies (probably the *Tachinidae* family), and a European yellow underwing moth (*Noctua pronuba*) have been observed in greasewood shrubland on the northwestern portion of SIAD's main parcel (Tetra Tech 2018). A flower moth (*Schinia* sp.) and a pyralid

moth (*Pyralidae* sp.) have been observed at the airfield, and western pygmy blue butterflies (*Brephidium exilis*) have been observed at multiple sites.

The fauna are transient species; moving in and out of areas depending on food and shelter availability, and may use the alternative locations at various times throughout the year. Those species with smaller home ranges, such as rabbits, fox, and lizards will be more likely to be in these areas than larger mammal species like wolves and deer. The smaller species make or use burrows for shelter and tend to move frequently throughout the landscape and are able to easily remove themselves away from construction activities to equally suitable habitats.

Special Status Species

No Federally-listed threatened or endangered species have been documented at SIAD (Tetra Tech 2018). SIAD does not have potential nesting habitat for Bald or Golden Eagles, however Golden Eagles migrate through the portion of Honey Lake Valley in which SIAD is located.

The U.S. Fish and Wildlife Service (USFWS) IPaC (Information for Planning and Consultation) evaluation of Threatened and Endangered species was obtained on 23 June 2018 (appendix C). Informal consultation was conducted on 23 October 2018 with Marcy Haworth, Wildlife Biologist, USFWS Reno, who confirmed that there are no Federally protected species under the Endangered Species Act, or their critical habitat, in the proposed project area (M. Hayworth *pers. comm.* 2018).

Ms. Katherine Blanchard; Environmental Specialist; California Department of Fish and Wildlife, was also consulted on 25 October 2018 to discuss any potential effects the proposed action may have on State-listed special status species or sensitive habitat. Ms. Blanchard concurred with the assessment of USACE biologists that State-listed species are not known or expected to be present in the proposed project area nor is any critical habitat present (K Blanchard *pers. comm.* 2018).

3.2.2.2 Environmental Consequences

No Action Alternative

The no action alternative would have no additional effects on biological resources. DLA-DS would continue their small-scale DEMIL operations with no expansion of DEMIL facilities into new areas on SIAD.

Alternative 1, Location D - TS22/TS23 parcel (Preferred Alternative)

Phase 1 and III (Phase 1, Upgrade existing DLA site to full-service DEMIL operation and Phase III, Relocate DEMIL operations to satellite location) Construction and Operations

Sierra Army Depot, California

The property at the existing DLA-DS site is highly disturbed, having no wildlife or habitat present. Therefore, any alterations to the property in Phases I and III would have no effect to biological resources.

Phase II (Construct new satellite DEMIL facility) Construction and Operations

Location D would have negligible to no effects on biological resources due to the highly disturbed surface (hardstand) and reduced vegetation. New utility connections and activities are near previously disturbed environments and would have a negligible change to the resultant ecology. The construction and operations of the DEMIL project would not pose a threat to eagles or migratory birds which would rise to the level of take, as defined by the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Act (MBTA).

Alternative 2, Location B - South of LTS (275-acre parcel)

The amount of scrub/shrub habitat loss in Locations B would be no more than 75 acres following full build-out of the DEMIL facility. There are no special status species or designated critical habitat in the area. The location is occupied by small mammal burrows and ground disturbance from construction of the DEMIL would result in the displacement of small mammals, reptiles, and birds that are prevalent across the 26,608 acres of scrub/shrub habitat currently on the installation.

Alternative 3, Location A - Adjacent to LTS (12.1-acre parcel)

The amount of scrub/shrub habitat loss in Location A would be Approximately 12 acres. There are no special status species or designated critical habitat in the area. The location is occupied by small mammal burrows and ground disturbance from construction of the DEMIL would result in the displacement of small mammals, reptiles, and birds that are prevalent across the 26,608 acres or scrub/shrub habitat currently on the installation.

3.2.2.3 Cumulative Effects

Cumulative effects on biological resources (e.g., wetlands, flora and fauna, and federally protected species) are expected to be minor from implementing the proposed or alternative actions. With the increased work area for demilitarization of equipment, SIAD can continue to support the Depot's expanded mission, and meet objectives of the natural resources management program.

3.2.2.4 Mitigation

No mitigation measures would be required since effects to biological resources would be considered minor and no special status species are expected to be present in the project area.

3.2.3 CULTURAL RESOURCES

3.2.3.1 Affected Environment

A records search was completed by staff of the Northeast Information Center on September 24, 2018 (appendix A). The records search revealed no cultural resources within the project's Area of Potential Effects (APE) and one prehistoric site within 1/4-mile of the APE. From February 19-22, 2019, archaeologists from the United States Army Corps of Engineers, Sacramento District, conducted a pedestrian survey of the APE. One new prehistoric site, a historic 1942 United States General Land Office (U.S. GLO) survey marker, and a historic railroad spur were identified during the survey. The project's alternative site locations have been modified to avoid the unevaluated prehistoric site and U.S. GLO survey marker. The historic railroad spur runs north-south through the middle of the southern half of the existing DLA-DS site. It is currently in use and regularly maintained by the railroad. The project has no plan to discontinue use, alter, realign, or remove the railroad spur and therefore, will not have an impact on the unevaluated historic resource.

Pursuant to Section 106 and 110 of the National Historic Preservation Act and 36 CFR, the California State Historic Preservation Officer and all Federally recognized tribes with interest in this area were sent consultation packages notifying them of the project in the preparation of this EA. Consultation is ongoing and will be complete prior to the FNSI being signed. In addition, as part of an update to the ICRMP, a total of 6,000 acres, including the alternative locations, will undergo a full archaeological survey, in the winter of 2019.

3.2.3.2 Environmental Consequences

No Action Alternative

The No Action Alternative would have no effect on cultural resources. The DLA-DS DEMIL operation would not be expanded at SIAD; therefore, no construction or operation-related activities with the potential to effect cultural resources would be pursued.

Alternative 1, Location D - TS22/TS23 parcel (Preferred Alternative)

Phase 1 and III (Phase 1, Upgrade existing DLA site to full-service DEMIL operation and Phase III, Relocate DEMIL operations to satellite location) Construction and Operations

The existing DLA-DS site is highly disturbed, with the northern half of the parcel either paved and developed or extensively graded for asset staging. The southern half of the parcel has been routinely graded and a railroad spur runs north-south through the middle of the parcel. The pedestrian survey did not reveal any prehistoric or historic cultural resources, with the exception of the unevaluated railroad spur, within the APE. Construction and operation activities for Phases I and III will not adversely affect cultural resources on the existing DLA-DS site.

Phase II (Construct new satellite DEMIL facility) Construction and Operations

Currently, Location D is being used for staging of vehicle assets waiting for decommissioning, including potential DEMIL. The area is heavily disturbed and graded. A pedestrian survey of this location and did not identify any cultural resources within the APE, and therefore construction and operation of Location D will not adversely affect cultural resources and no effects to resources are anticipated.

Alternative 2, Location B - South of LTS (275-acre parcel)

As with Alternative 1, no effects to cultural resources would be expected to occur from construction and operation of Alternative 2 because no culturally significant resources were identified within Location B.

Alternative 3, Location A - Adjacent to LTS (12.1-acre parcel)

No effects to cultural resources would be expected to occur as a result of construction and operation of Alternative 3 because no culturally significant resources were identified within Location A.

3.2.3.3 Cumulative Effects

None of the project alternatives would contribute effects to cultural resources within the APE and therefore, no mitigation is required unless an inadvertent discovery is made. In such case, the project would stop until a coordinated response is determined. There are no cumulative effects to cultural resources.

3.2.3.4 Mitigation

Pending completion of consultation with the SHPO and tribes, it is not anticipated that any of the projects would have adverse effects on cultural resources. Mitigation is not expected to be required.

3.2.4 UTILITIES

3.2.4.1 Affected Environment

Utilities on SIAD include potable water supply, wastewater systems, and storm water systems, energy sources such as electricity and natural gas, and solid waste handling systems. SIAD owns and operates its own on-depot potable water sources, wastewater treatment facilities, and solid waste landfill. SIAD has on-depot infrastructure for its electricity, natural gas, fuels, communications service, and off-site disposal of hazardous waste. SIAD's utility infrastructure is concentrated in the southern portion of the main parcel. SIAD's water distribution system

consists of more than 30 miles of water mains with associated valves, fire hydrants, and related equipment. SIAD's groundwater wells supply enough water to support wildland fire operations as needed without affecting other on-depot water uses. SIAD's water infrastructure is concentrated in the cantonment and warehouse areas. All electric, communications, water, and natural gas lines area within close proximity to Locations A, B, and D. The existing DLA-DS site is currently connected to these utilities.

3.2.4.2 Environmental Consequences

No Action Alternative

The no action alternative would have no additional effects on utilities. The current level of DEMIL activities would continue to use SIAD's existing utility systems as they do now for DEMIL operation. The goals of the expanded DEMIL project would not be met.

Alternative 1, Location D - TS22/TS23 parcel (Preferred Alternative)

Phase 1 and III (Phase 1, Upgrade existing DLA site to full-service DEMIL operation and Phase III, Relocate DEMIL operations to satellite location) Construction and Operations

Modifications to the existing utility infrastructure would be required under Phase I at the existing DEMIL facility, but SIAD and DLA-DS would expect negligible effects on utilities from implementing the proposed DEMIL. During construction, the additional use of utilities is expected to be minor. Some equipment, such as security lighting, will employ net zero energy (solar) sources. Under Phase III the warehouse activities are anticipated to use less of the utilities than the DEMIL activities.

Phase II (Construct new satellite DEMIL facility) Construction and Operations

Under Phase II, electrical demand is anticipated to increase but remain within the current system capabilities. Energy supplied by SIAD's Net Zero initiative would be at least part of the energy supply to the DEMIL facility and other energy efficient equipment like outdoor lighting would be utilized at the LTS and DEMIL areas. Implementing the medium-sized DEMIL facility is not expected to require changes to the utility infrastructure at SIAD. All utility connections under Phase II are accessible from nearby power and communication lines and a water main is located just east at the SIAD LTS facility. The current septic systems located on SIAD are expected to have enough capacity for holding additional amounts of wastewater. Effects to existing utilities at any of the proposed locations would be negligible and would be within the installation's utility system capacity.

Alternative 2, Location B - South of LTS (275-acre parcel)

Utility resource effects would be the same as Alternative 1.

Alternative 3, Location A - Adjacent to LTS (12.1-acre parcel)

Utility resource effects would be the same as Alternatives 1 and 2.

3.2.4.3 Cumulative Effects

The operations occurring at the DLA-DS DEMIL site is unlikely to exhaust utility usage when combined with the utility demand of the LTS since storage operations do not require continued energy use. All utility types are accessible in the areas surrounding LTS and are expected to be able to support the scale of the DEMIL project activities. No new large-scale projects or proposals at SAID have been identified that when combined with the Preferred Alternative, would contribute to utility use. SIAD utilities are capable of handling the increased usage needed to achieve mission goals; therefore, cumulative effects to utilities are anticipated to be negligible.

3.2.4.4 Mitigation

Mitigation would include precautions for overuse of any utilities by upgrading, expanding, and monitoring utility performance prior to and after construction.

3.2.5 HAZARDOUS AND TOXIC SUBSTANCES

3.2.5.1 Affected Environment

SIAD was initially used as an ammunition storage depot after its construction in 1943. Following World War II, storage, special weapons, missile surveillance, and ammunition maintenance facilities were added (Tetra Tech 2018). The 1995 Base Realignment and Closure (BRAC) program reduced the scope of the installation's ammunition mission, and increased its emphasis on vehicle storage and supply, to the point where its current mission and operations are completely logistics based. Ammunition storage and demilitarization are no longer part of SIAD's mission.

The SIAD parcels have undergone years of investigation and cleanup stemming from the storage and ammunition demilitarization activities since 1943. SIAD has several IRP and Military Munitions Response Program (MMRP) sites (Figure 3-2). Contaminated soil and/or groundwater might be present at IRP sites and unexploded ordnance (UXO) might be present at MMRP sites.

The current DLA-DS facility was formerly known as the Defense Reutilization and Marketing Office (DRMO) Yard, and has a long history of uses as an area for the storage and processing of materials for recovery. The DRMO Yard was used to manage excess property for the military services, including scrap metal and scrap recovered from the demolition and DEMIL activities. The scrap metal was stored in the DRMO Yard prior to being shipped offsite for recycling or disposal.

The DRMO Yard is one of three source areas of contamination for the DRMO Open Trench environmental restoration site identified for an IRP. The other two contamination sources are the Open Trench and the Burn and Debris Area. Both the trench and the burn area are outside of the current DLA-DS site; however, semi-volatile organic compounds (SVOCs) and volatile organic compounds (VOCs) are found between the soil surface and the soil groundwater interface (100 feet below ground surface) at the trench site, and the groundwater plume from the trench encompasses most of the DLA-DS site.

The soil at the DLA-DS site is contaminated with pesticides, polychlorinated biphenyls (PCBs), metals and petroleum hydrocarbons at the surface and subsurface (USACE, 2016). The detected concentrations of these soil contaminants are at acceptable industrial use levels (USACE 1997). The groundwater under the site is a potential source of VOCs. Discrete VOC sources were not identified during a 1993 remediation investigation, but elevated levels of trichloroethene (TCE) were detected in soil gas at the DLA-DS site.

Groundwater and soil remedy techniques being implemented for the entire DRMO Open Trench Site include using soil vapor extraction (SVE) and bioventing to reduce the concentration of VOCs, SVOCs and petroleum hydrocarbons. The extracted vapor is treated using granular activated carbon (GAC). The SVE system is used to remediate TCE in soil within localized areas.

Groundwater remediation techniques implemented for this site include the installation of multiple groundwater monitoring wells and the evaluation of the natural attenuation of TCE. Administrative land use controls enforced for the site include prohibiting the use and exposure of the contaminated soil and groundwater on site (USACE, 2016).

The USACE conducted a Phase I environmental site assessment in September 2018 for Locations A, B, and D (appendix B).

In accordance with DoD policy defining the classifications, Locations A, B and D have no known or anticipated contamination. The existing DLA-DS site has known contaminations, currently undergoing monitoring/remediation and the proposed uses are acceptable uses of that property on site but there are also remediation actions currently being conducted.

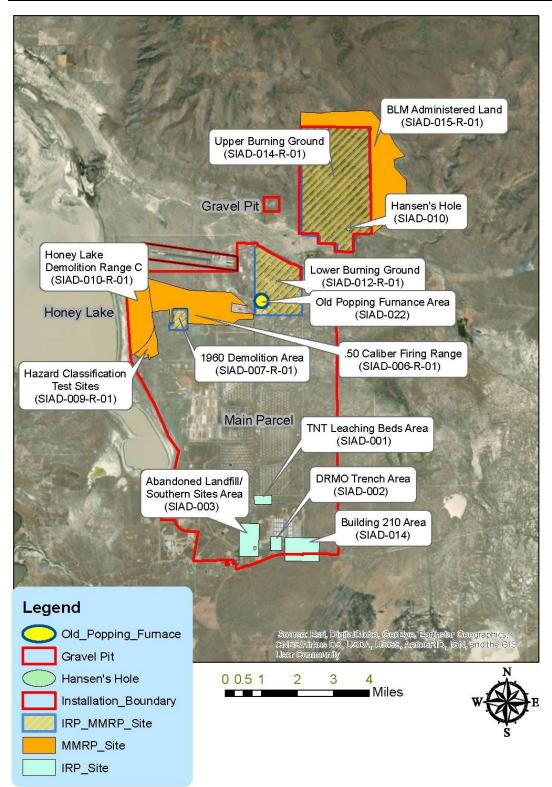


Figure 3-2. Locations of IRPs and MMRPs on the SIAD installation.

RCRA and CERCLA Status

Under the Land Use Control Implementation Plan (LUCIP) for SIAD (2016), Locations A, B, and D are not subject to any RCRA or CERCLA uses or restrictions and they do not contain any hazardous substances or materials. The locations for the alternatives are not RCRA or CERCLA regulated and do not follow any EPA regulations, guidance, and policies required under these laws. Hazardous or non-hazardous waste is not present on these lands and there are no commitments in place for removal of any waste types at any alternative location prior to construction.

3.2.5.2 Environmental Consequences

No Action Alternative

The no action alternative would have minor additional effects on hazardous and toxic substances at SIAD. Current DEMIL operations and management activities would remain in place; however, the increase in storage time for assets at SIAD awaiting transport to another DEMIL facility would increase the potential for leakage of hazardous material. Also, the additional handling of assets to prepare for transport would represent an increased potential for spills. While the increased potential for toxic and hazardous material spills would be greater under the no action alternative than under the action alternatives, BMPs and procedures mandated by regulations for handling and storage of hazardous materials at the installation would still keep the potential effects of this no action alternative as minor.

Alternative 1, Location D-TS22/TS23 parcel (Preferred Alternative)

Phase 1 and III (Phase 1, Upgrade existing DLA site to full-service DEMIL operation and Phase III, Relocate DEMIL operations to satellite location) Construction and Operations

Construction of the concrete pad, warehouse, and office building at the existing DLA-DS site would disturb soils that could contain known contaminants, increasing the potential of exposure to humans and the environment. However, given the low levels of contaminants , and that established remediation techniques identified in the DRMO Trench Area final Record of Decision (ROD)/Remedial Action Plan (USACE 1997) the risk of hazardous material exposure to humans and the environment during construction of Phase I facilities would be negligible.

Phase II (Construct new satellite DEMIL facility) Construction and Operations

There is no known contamination site in Locations D. During DEMIL operations, the contractor is responsible for handling and disposing of any hazardous substances. Types of substances are mainly petroleum products such as diesel fuel, gasoline, oils, brake and transmission fluids, and greases. These petroleum products are drained prior to DEMIL operations, however *de minimis* amounts remain and are controlled, contained, and disposed of properly. Implementing the proposed action would have minor changes to the use, generation, transport, storage, or disposal

of hazardous and toxic substances and waste at SIAD. With implementation of BMPs identified below in Section 3.7.4, effects to resources from hazardous and toxic substances is expected to be minor as a result of this alternative.

Alternative 2, Location B - South of LTS (275-acre parcel)

There are no known contamination sites within Location B. Handling and disposal of hazardous and toxic substances effects would be the same as Alternative 1. With implementation of BMPs identified below in Section 3.7.4, effects to resources from hazardous and toxic substances is expected to be minor as a result of this alternative.

Alternative 3, Location A - Adjacent to LTS (12.1-acre parcel)

There are no known contamination sites within Location A. Handling and disposal of hazardous and toxic substances effects would be the same as Alternative 1. With implementation of BMPs identified below in Section 3.7.4, effects to resources from hazardous and toxic substances is expected to be minor as a result of this alternative.

3.2.5.3 Cumulative Effects

No new large-scale projects or proposals at SIAD have been identified that when combined with the proposed project, would contribute to increases to hazardous substances. LTS does not create significant amounts of hazardous waste and would not be anticipated to contribute to any cumulative effects for hazardous and toxic substances. SIAD facilities are capable of handling these increased amounts that are needed to achieve mission goals; therefore, cumulative effects to resources as a result of hazardous substances is negligible.

3.2.5.4 Mitigation

The BMPs for construction and operations include measures to prevent spills and possible contamination of surface and ground waters. These would involve proper storage of fuels in fueling stations that are far from water resources. Contractors carrying out DEMIL operations are required to follow spill prevention, containment, and countermeasure plans approved by SIAD and DLA-DS. DEMIL-related construction and operation would not occur during adverse weather conditions and all areas disturbed during construction would be covered prior to rain events.

3.2.6 TRAFFIC AND TRANSPORTATION

3.2.6.1 Affected Environment

SIAD is bounded by Honey Lake and Pole Line Road to the west, Duck Lake Road to the east, Wendel Road and railroad tracks to the north, and Herlong Access Road/Susanville Road to the south. The closest major metropolitan area is Reno, Nevada, approximately 62 miles southeast of SIAD, accessible by U.S. Route 395, Garnier Road, and Herlong Access Road/Susanville

Road. The main gate is located along Herlong Access Road/Susanville Road. The existing roadways used to access the alternative locations in this area are Chewing Gum Road traveling south to north and Magazine traveling east to west (Figure 3-3).

There are over 200 miles of roadway on SIAD, including about 40 miles of asphalt concrete, 100 miles of medium bituminous, and 60 miles of gravel or other surfaces (SIAD, 1994).

At the north end of SIAD, there are Government-owned railroad tracks that connect with the Union Pacific Railroad, Batten Station (SIAD, 1995). The Union Pacific Railroad connects with the Herlong Station at the south end of the depot. The railways at SIAD provide approximately 60 miles of track, 34 miles of main line, 15 miles of siding, and 11 miles of classification yard trackage (SIAD, 1994).

Amedee Army Airfield runway, in the north portion of the installation, is 10,000 feet long. It was expanded to its current size in 2005 and includes visual approach lights (SIAD, 2009).

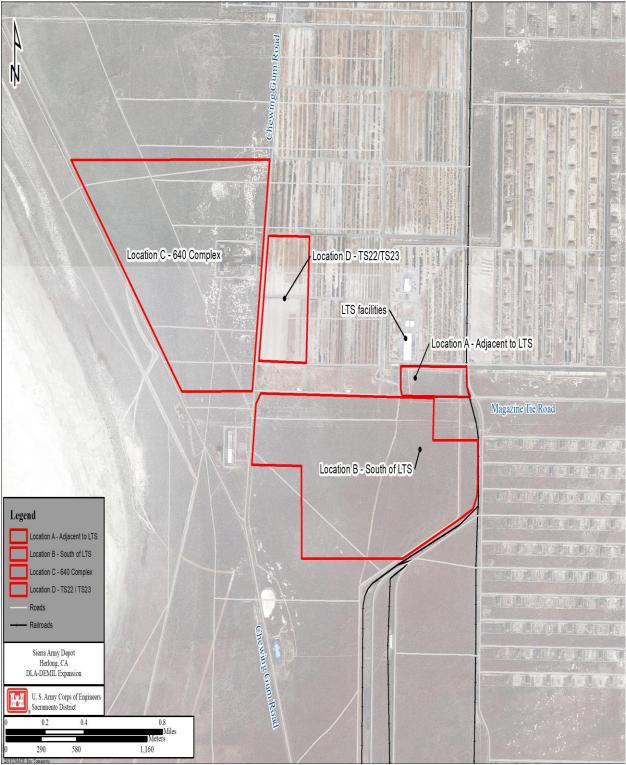


Figure 3-3. Access Roads to and from the three alternative locations (A, B, and D)

3.2.6.2 Environmental Consequences

No Action Alternative

Traffic and transportation would experience a minor increase from current levels under the existing DEMIL program, resulting from the need to transport assets being stored at SIAD to DEMIL facilities in other parts of the country. Traffic levels resulting from construction of the proposed project would not occur.

Alternative 1, Location D-TS22/TS23 parcel (Preferred Alternative)

Phase 1 and III (Phase 1, Upgrade existing DLA site to full-service DEMIL operation and Phase III, Relocate DEMIL operations to satellite location) Construction and Operations

Minor traffic is expected to increase on SIAD from construction at the existing DLA-DS site (Phase I) and during transition from DEMIL operations to warehouse storage (Phase III). Public traffic off the installation is expected to be negligible and have no impacts to traffic volumes or patterns.

Phase II (Construct new satellite DEMIL facility) Construction and Operations

Implementing the proposed action would most likely increase use of the roads to and from SIAD but not to a significant level that would adversely affect traffic or transportation. Implementing the DEMIL is not expected to significantly change on- or off-installation traffic volume or patterns, or transportation operations. Items for storage and DEMIL are typically delivered to the LTS and the DLA-DS areas via truck. Long-term operations over the next 20 years would be near the LTS facility for the DEMIL of future assets. There are additional egress and ingress options for this location to the north off Chewing Gum Road depending on traffic loads on surrounding roads. Repair work of roads will likely increase from higher traffic use. Overall, effects to traffic and transportation from Alternative 1 would be considered minor.

Alternative 2, Location B - South of LTS (275-acre parcel)

Traffic and transportation levels would increase at the same rate as the preferred alternative due to the same DEMIL demand quotas. Location B would be restricted to using Magazine Tie Road and would increase traffic by sharing the road with LTS traffic.

Alternative 3, Location A - Adjacent to LTS (12.1-acre parcel)

Transportation levels would be similar to Alternatives 2. Location A would be restricted to using Magazine Tie Road and would increase traffic by sharing the road with LTS traffic.

3.2.6.3 Cumulative Effects

No new large-scale projects or proposals at SIAD have been identified that when combined with the all of the Alternatives, would contribute to increases in traffic and transportation. SIAD roads and infrastructure are capable of handling the increased traffic patterns and the increase in transportation to and from SIAD is needed to achieve mission goals; therefore, cumulative effects to traffic and transportation are anticipated to be negligible. Some roads in the area would be subject to increased traffic and transportation levels from LTS activities, but traffic would not rise to significant levels to create any noticeable effects.

3.2.6.4 Mitigation

There are no mitigation measures planned for the traffic and transportation resources at this time; however, BMPs during construction and operations would be anticipated to include signage and alternative routes if and when needed.

3.2.7 NOISE

3.2.7.1 Affected Environment

Noise is generally described as unwanted sound, which can be based either on objective effects (i.e., hearing loss, damage to structures, etc.) or subjective judgments (e.g., community annoyance). Sound is usually represented on a logarithmic scale with a unit called the decibel (dB). Sound on the decibel scale is referred to as sound level.

The threshold of human hearing is approximately 3 dB, and the threshold of discomfort or pain is around 120 dB. Some statistical noise levels are stated in terms of decibels on the A-weighted scale (dBA). Noise levels stated in terms of dBA reflect the response of the human ear by filtering out some of the noise in the low and high frequency ranges that the ear does not detect well. The A-weighted scale is used in most ordinances and standards.

Onsite noise levels are regulated, in a sense, through the Occupational Safety and Health Administration (OSHA). The noise exposure level of workers is regulated at 90 dBA, over an 8-hour work shift to protect hearing (29 CFR § 1910.95). Onsite noise levels are anticipated to be in the 70 to 85 dBA range. Areas above 85 dBA would be posted as high noise level areas and hearing protection would be required.

The noise levels at Locations A, B, and D are low and generated by vehicle sound.

SIAD is within the Wendel Planning Area, under the Lassen County zoning district, which has established natural resources and noise policies. SIAD's primary noise-generating activities are railroad and airfield operations, vehicle traffic, and warehousing. SAID's activities (including DEMIL operations) do not generate incompatible noise levels and are a considerable distance from the installation perimeter (HDR 2018).

Sierra Army Depot, California

3.2.7.2 Environmental Consequences

No Action Alternative

Noise levels would remain the same under the current DEMIL program, with marginal noise related effects to sensitive species within the installation.

Alternative 1, Location D - TS22/TS23 parcel (Preferred Alternative)

Phase 1 and III (Phase 1, Upgrade existing DLA site to full-service DEMIL operation and Phase III, Relocate DEMIL operations to satellite location) Construction and Operations

Noise levels would increase in intensity and duration from the operation of equipment during site construction and operation of DEMIL activities. The area is isolated within the SIAD property and sound will attenuate to low levels that are not expected to disturb sensitive areas, such as nesting areas or wetlands. The existing DLA-DS site is near the outside fence perimeter of the installation and in the warehouse district where most of the SIAD work population is located. Noise generated by DEMIL operations is expected to have a minor effects on worker populations within the warehouse district; however, BMPs identified in Section 3.9.3 would ensure that these effects would remain less than significant. Transition of the existing DLA-DS site to warehouse operations during Phase III would eliminate the additional noise generated from DEMIL operations in the warehouse district.

Phase II (Construct new satellite DEMIL facility) Construction and Operations

Noise generated from DEMIL construction and operation are more desirable at the alternative locations than at the existing DLA-DS site. The equipment used at the LTS facility are similar to those used at the existing DLA-DS site. Additional noise-generating equipment that would be operated at Locations A, B, and D is not expected to significantly increase noise levels that would have significant adverse effects on sensitive receptors. In addition, Location D is the alternative location furthest removed from offices located at the main entrance to LTS. This distance further reduces the level of noise-related effects to installation personnel working at these office locations in comparison to the other alternative locations being considered. Due to Location B's proximity to offices located at the LTS facility entrance, noise-related effects would moderately increase; however, BMPs identified in Section 3.9.3 would ensure that these effects remain minor. Location A is immediately adjacent to the LTS facility entrance and offices occupied by installation personnel. Noise-related effects from construction and operation of this alternative increase more than Location D or B; however, BMPs identified in Section 3.9.3 would ensure that these effects would remain negligible.

Alternative 2, Location B - South of LTS (275-acre parcel)

All other noise-related effects would be the same as Alternative 1.

Alternative 3, Location A - Adjacent to LTS (12.1-acre parcel)

All other noise-related effects would be the same as Alternative 1 and 2.

3.2.7.3 Cumulative Effects

No large-scale projects or proposals at SIAD have been identified that, when combined with the proposed project, would contribute to significant increases in noise levels. Operations performed at LTS do not generate high noise decibels, and are not anticipated to contribute to any cumulative noise effects. Cumulative effects to noise is anticipated to be negligible.

3.2.7.4 Mitigation

BMPs that are currently used for noise attenuation on SIAD property would be used for the DEMIL project during construction and operation. Expected BMPs to be applied include: monitoring sound levels; operation hours; and modifications to loud equipment with muffling devices.

SECTION 4.0 CONCLUSIONS

This EA identifies, documents, and evaluates the effects of three alternative actions that would implement the DLA-DS Development Plans and Demilitarization Operations for SIAD in Lassen County, California as well as a No Action Alternative. SIAD does not anticipate implementing the proposed action to result in any significant environmental effects. A summary of environmental effects for each alternative is listed below in Table 4-1.

Implementation of the No Action Alternative would have negative effects on the environment, because the requirement to conduct DEMIL would remain. The No Action Alternative would force SIAD to develop additional hardstands to temporarily store additional projected assets prior to shipping to another location for DEMIL. The shipping would create additional unnecessary transportation with additional consumption of fuels, unnecessary traffic, and unproductive use of additional man-hours associated with the loading and movement of assets as part of the shipping process.

Since the three action alternatives all included the same proposed Phase I and Phase III DEMIL construction and operation activities at the existing DLA-DS site, the primary differences in environmental effects among them was the alternative locations considered for construction of the new DEMIL facility.

Following review of the project alternatives under the NEPA scope of affected resources, Alternative 1 - DLA-DS Site Improvements and Expansion at Location D - TS22/TS23 was chosen as the *Preferred Alternative* for the following reasons:

- The proximity of the location to the assets at LTS awaiting DEMIL operations
- No presence of biological resources that would be either destroyed or displaced by the construction of the DEMIL facility.
- No known contamination of hazardous and toxic materials present at the location.
- The location is close to all required utility connections.
- Effects from noise-generating activities would be the lowest of the three action alternatives.

Locations A and B are also acceptable alternatives.

Since the finding of the proposed action resulted in no significant environmental effects, SIAD and DLA-DS are not required to prepare an EIS and will publish a FNSI in accordance with 32 CFR § 651

Resource	Alternatives			
	No Action Alternative	Alternative 1 Location D (Preferred Alternative)	Alternative 2 Location B	Alternative 3 Location A
Groundwater Resources	No Effect	Minor	Minor	Minor
Biological Resources	No Effect	Negligible	Minor	Minor
Cultural Resources	No Effect	No Effect	No Effect	No Effect
Utilities	No Effect	Negligible	Negligible	Negligible
Hazardous and Toxic Substances	Minor	Minor	Minor	Minor
Traffic and Transportation	Minor	Negligible	Negligible	Negligible
Noise	No Effect	Minor	Minor	Minor

Table 4-1. Summary of Potential Environmental Effects for Each Alternative

Notes:

<u>No Effect:</u> A resource would not be affected by the action being evaluated when compared to the forecasted future without project condition.

<u>Negligible</u>: A resource would not be affected or the effects would be at or below the level of detection, and changes would not result in any measurable or perceptible consequences when compared to the forecasted future without project condition.

<u>Minor</u>: Effects on a resource would be detectable, although the effects would be localized, small, and of little consequence to the sustainability of the resource when compared to the forecasted future without project condition. Mitigation measures, if needed to offset adverse effects, would be simple and achievable.

<u>Moderate</u>: Effects on a resource would be readily detectable, long-term, localized, and measurable when compared to the forecasted future without project condition. Mitigation measures, if needed to offset adverse effects, would be extensive and likely achievable. <u>Significant</u>: Effects on a resource would be obvious, long-term, and would have substantial consequences on a regional scale when compared to the forecasted future without project condition. Extensive mitigation measures to offset the adverse effects would be required and

success of the mitigation measures would not be guaranteed.

<u>Beneficial</u>: Effects on a resource would be beneficial when compared to the forecasted future without project condition.

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