DEPARTMENT OF THE ARMY
UNITED STATES ARMY ALASKA

ENVIRONMENTAL ASSESSMENT

CONSTRUCTION OF THE ASSEMBLY BUILDING AND MISSION SUPPORT TRAINING FACILITY, AND DEMOLITION/ RECONSTRUCTION OF THE BARRACKS FORT WAINWRIGHT, ALASKA

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APPROVED BY:

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

SUMMARY

U.S. Army Alaska (USARAK) is proposing to construct an assembly building (project number 54033), barracks projects (project numbers 46789 and 58048), and a Mission Support Training Facility (MSTF) (project number 57341) at Fort Wainwright, Alaska. The proposed facilities will help improve deployment efficiencies (assembly building), increase quality of life for military personnel (barracks), and greaten the capability to perform military activities in military operations (MSTF).

Three alternatives have been analyzed for the construction of the assembly building. Alternative A- 'No Further Action' proposes no construction activities leaving deployment assembly at various locations in small unit environments. Alternative B- 'Upgrade' proposes rebuilding the old theatre. Preferred alternative C- 'Construction of a new assembly building.

Three alternatives have been analyzed for the replacement construction of the phase 4a barracks facility. Alternative A- 'No Further Action' proposes no construction activities, maintaining the original converted buildings for lodging needs. Alternative B-'Upgrade' proposes remaining on the same site and upgrading of the old barracks buildings. Preferred alternative C- 'Construction of new barracks.

Two alternatives have been analyzed for the construction of the Mission Support Training Facility (semantically has been changed to Battle Command Training Center (BCTC). Alternative A- 'No Further Action' proposes no construction activities with no simulation training consistent with Army strategies. Preferred alternative B- Construction of a MSTF.

Environmental and socioeconomic effects will be relatively minor. Wetlands and other special aquatic sites are not present (upon initial evaluation) and will not be affected by the action. Threatened and endangered species do not use the project area and will not be impacted. Noise levels at this facility would be compatible with existing land uses. Construction and use of the facilities will slightly increase the post's energy demands, air emissions, and traffic levels.

To mitigate potential adverse impacts, the contractor will be required to prepare a storm water pollution control plan and implement best management practices to stabilize exposed soils and manage storm water runoff. Stabilization and re-vegetation measures will be coordinated with USARAK's Department of Public Works.

Since the potential to encounter soil contamination exists, geophysical borings may be taken and samples will be screened for likely contaminants if necessary. If contamination is encountered, appropriate measures will be taken to remediate the site.

The environmental assessment supports the conclusion that the project does not constitute a major Federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement is not required to construct and maintain the proposed

Assembly Building, Barracks and Mission Support Training Facilities at Fort Wainwright, Alaska.

I. PURPOSE AND NEED FOR THE PROPOSED ACTION

A. Purpose

This EA was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 [42 U.S.C. 4321 *et seq.*], Council on Environmental Quality Regulations [40 CFR Parts 1500-1508], and Army Regulation 200-2, *Effects of Army Actions* [32 CFR Part 651.

USARAK is preparing an environmental impact statement (EIS) to assess the effects of the force transformation of the 172nd Infantry Brigade into a Stryker Brigade Combat Team (SBCT). A notice of intent to prepare an EIS was published in the Federal Register on March 4, 2002 (Vol. 67, No. 42, pp. 9716-1917).

The need for the Assembly, Barracks and Mission Support Training facilities is independent of the force transformation of the 172nd Infantry Brigade. The proposed facilities are considered separate and complete projects. Fort Wainwright will experience no increase in troop strengths as a result of this proposed action.

The proposed Assembly, Barracks and Mission Support Training facilities are considered necessary to support the mission requirements of the United States Army Alaska (USARAK) at Fort Wainwright in Fairbanks, Alaska (Figures 1, 2). The planning and designing of the Assembly, Barracks and Mission Support Training facilities will be accomplished through three separately funded projects. This Environmental Assessment (EA) analyzes the combined effects of these three projects.

The purpose of the Proposed Action is to construct facilities that meet requirements for implementation of the USARAK military mission at Fort Wainwright. Failure to construct these facilities would result in less efficient deployment capability (assembly building), a decreased quality of life for military personnel (barracks), and a lesser capability to perform military activities in military operations (MSTF).

B. Need

1. Assembly Building

There are no large, adequate facilities for large-scale briefings at Fort Wainwright. Briefings are primarily held at a small unit scale in other facilities. Aircraft hangers are large enough, but they do not have adequate heating or other facilities for large groups of personnel. The use of small-scale briefings delays deployment times during crisis and contingency operations. Additionally, current hangars have extremely poor communication for conveying information.

2. Barracks

Existing unaccompanied enlisted personnel housing was constructed in the 1950s with open bays and gang latrines. The open bays have been partitioned into sleeping rooms. Substandard

housing results in increased maintenance and operation costs, high energy use, and decreased quality of life for military personnel, which affects retention rates for highly trained and skilled soldiers. The proposed barracks would replace outdated living facilities and would provide housing for about 432 enlisted personnel.

3. Mission Support Training Facility
There are no available permanent facilities at Fort Wainwright to house new simulation training support requirements based on evolving Department of the Army combat doctrine and training strategies. New mission requirements rely on leveraging technology to reinforce and sustain skills, knowledge, and abilities in a more compressed timeframe. The simulation training facility would replace some field exercise training events, which are more expensive, create environmental damage, use more fuel, and unnecessarily create wear and tear on combat equipment.

C. Objectives

1) Increase the efficiency of operations, thereby, reducing delays.
2) Implement simulation training consistent with modern Army strategies.
3) Improve housing standards for enlisted soldiers

The decisions to be made are whether to implement the Proposed Action, modify the Proposed Action, or select an alternative action and simultaneously satisfy CEQ regulations for NEPA documents as defined in 40 CFR ξ 1500.1. The Commander, USARAK will make this decision.

D. Environmental Baseline Study

An environmental baseline study (EBS) was conducted for all alternatives to identify potential concerns for inclusion in this Environmental Assessment. Items investigated were:

(1) Any property or structure whose known use was to be used to store, release, or otherwise dispose of hazardous substances. None were found on the construction footprints. Several contamination sites were found, however, in the immediate vicinity around the construction footprints.

(2) Fort Wainwright Environmental Office records, including all applicable documents associated with the Installation Restoration Program.

(3) Any visible features indicating potential contamination, as detected on a site inspection (site inspection occurred August 16th, 2002).

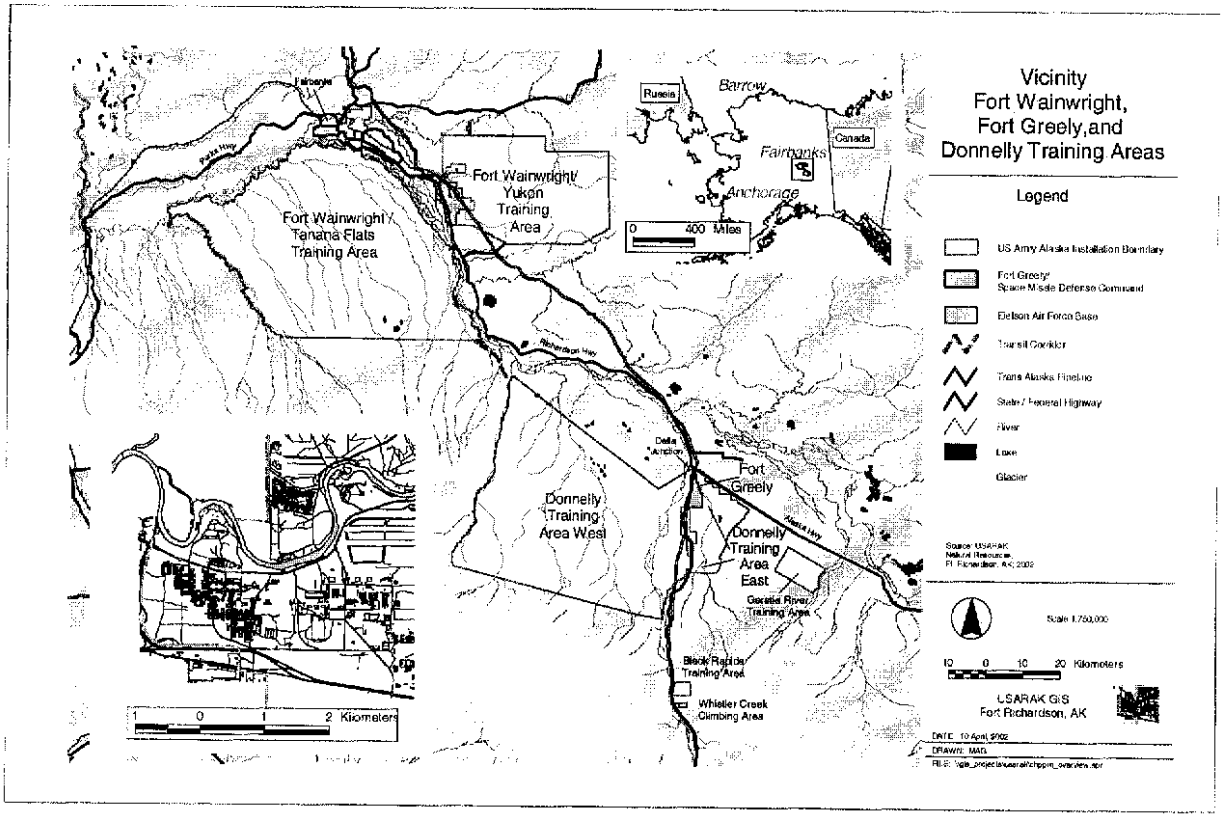
(5) Any permits, permit discontinuances or closure requirements that apply to the sites.

(6) Other sources of information, such as interviews and historic records.

II PROPOSED ACTIONS AND ALTERNATIVES

Fort Wainwright is located in central Alaska (Figure 1), north of the Alaska Range in the Tanana River Valley. The Post lies 120 miles south of the Arctic Circle near the cities of Fairbanks and North Pole in the Fairbanks North Star Borough. All three proposed construction projects would be located within Main Post (Figure 1).

Figure 1-Location of Fort Wainwright, Alaska and The Cantonment Area

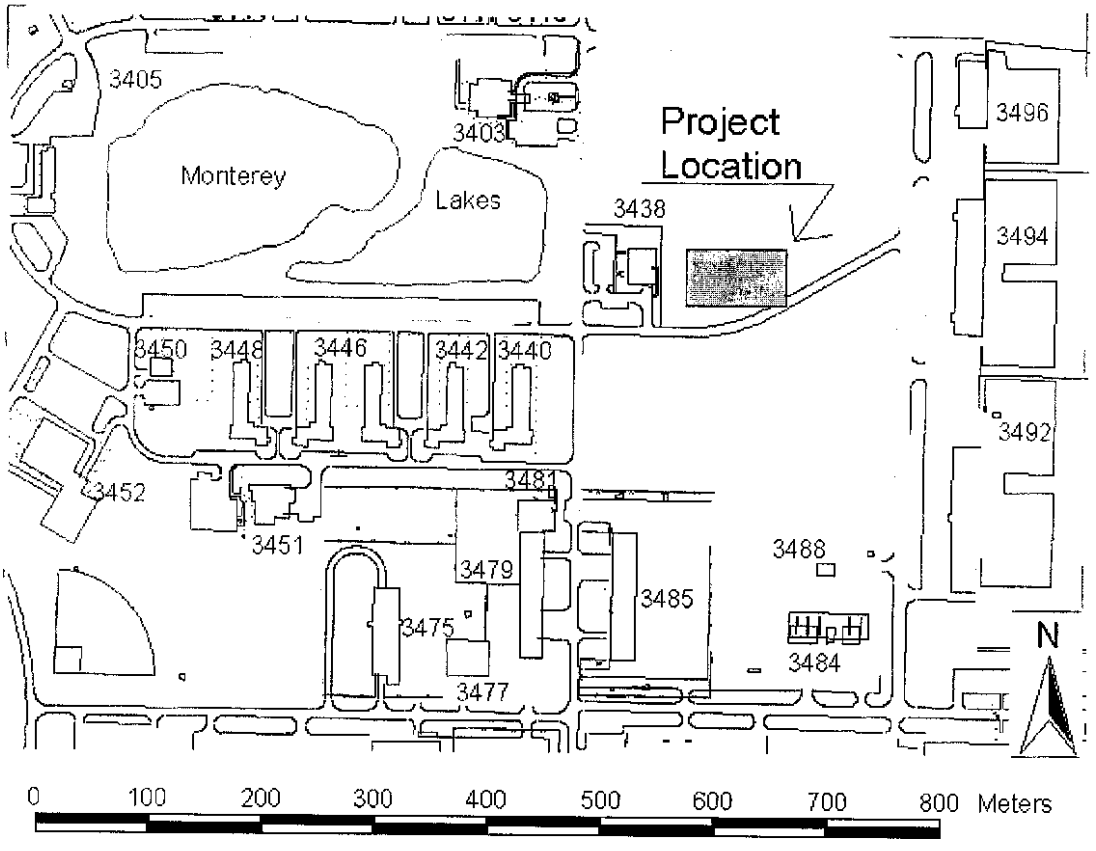


A. Alternative 1 – 'Preferred Action and Alternative'

Assembly Building

The assembly building would have seating for 750 people to support briefings for deployments and military operations at Fort Wainwright. Figure 2 shows the layout of the building on the site. It would also include administration areas, storage, mechanical spaces, food vending area, and toilet facilities. The building would include physical security and anti-terrorism/force protection. Heat and electricity would be provided by the coal-fired central heating and power plant. The facility will have a parking lot with 200 available spaces. The assembly building is tentatively scheduled for construction start in September 2002, and completion by September 2003. There will be no demolition necessary for construction of the new assembly building.

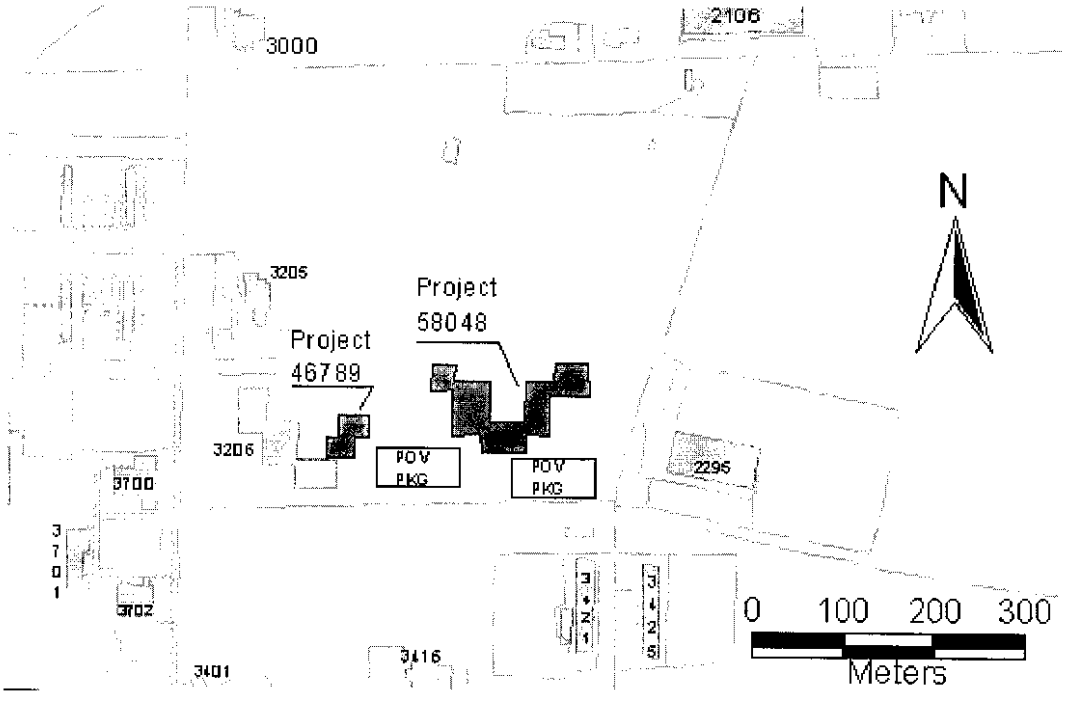
Figure 2. Proposed Assembly Building, Fort Wainwright, Alaska.



Phase 4a Barracks

The Phase 4a Barracks project would include living/sleeping rooms, semi-private baths, walk-in closets, and kitchen facilities for occupants. The barracks would also include laundry facilities, mailboxes, linen issue, and a manager's office. The project includes parking and recreation areas. Handicapped access would be provided to public areas of the barracks. Anti-terrorism and force protection measures would be included. Heat and electricity would be provided by the coal-fired central heating and power plant. Figure 3 shows the layout of the barracks on the site. The barracks would replace outdated 1950s quarters and would provide housing for about 432 enlisted personnel. The Phase 4 Barracks is tentatively scheduled for construction start in March 2004, and completion by September 2006. There will be no further demolition necessary for the construction of the new barracks.

Figure 3. Proposed Barracks Buildings, Fort Wainwright, Alaska.



Mission Support Training Facility

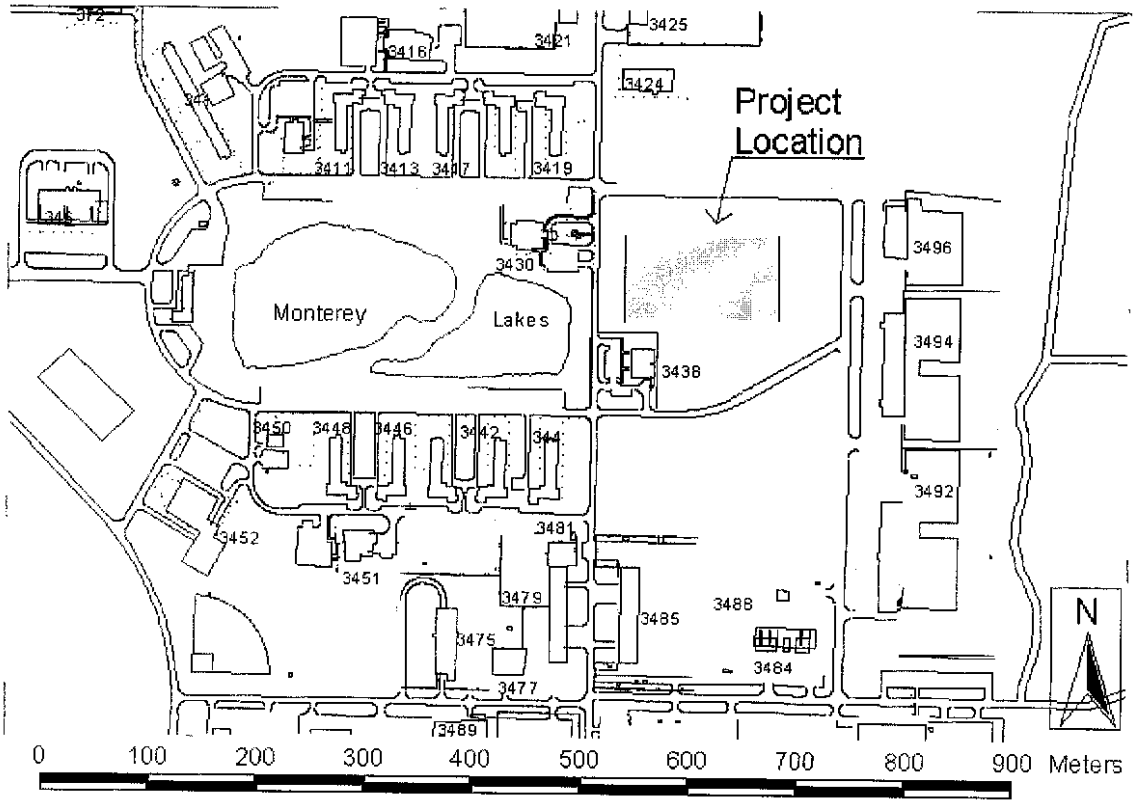
The MSTF project consists of one building with several functions. Primarily, it would serve as a digital training facility that links live, virtual, and constructive training environments. This building would provide individual and collective training support through battlefield visualization utilizing appropriate simulations and command, control, communications, computers, intelligence, surveillance, and reconnaissance simulations to support training events and mission execution. Facilities would include administrative offices and conference rooms, digital classrooms, instructor preparation space, distance learning center, simulation training technical support area, reference library, lobby, break room, centralized network server/control room, computer maintenance room, security vault, Battle Simulation Center, Reconfigurable Tactical Operations Center, Electronics Operations Center, Conduct of Fire Trainer, Mortar Trainer, Joint Deployment Logistics Module, Unmanned Aerial Vehicle Simulator/Trainer, JANUS/Force XXI Battle Command, brigade and below area, After Action Review room, information systems, office storage, field equipment storage area, latrines, insulated roll-up door(s), vehicle loading dock, hard stand, and mechanical, electrical, and communications closets.

door(s), vehicle loading dock, hard stand, and mechanical, electrical, and communications closets.

Additionally the building would serve as a digital instruction facility, providing initial capabilities to use simulations in training scenarios throughout other key components of the live, virtual, and constructive training environment at Fort Wainwright. Facilities would include administrative offices, 16 classrooms, break room, office storage, field gear storage area, reference library, centralized network/server room, computer maintenance room, information systems, latrines, security vault, and mechanical, electrical, and communications closets.

The building would have design features to address permafrost and seismic issues. Underground utilidors would be used to protect utilities in subzero climate. Anti-terrorism/force protection features would be added. Heat and electricity would be provided by the coal-fired central heating and power plant. Figure 4 shows the layout of the Mission Support Training Facility on the site. The MSTF is tentatively scheduled for construction start in January 2003 and completion by January 2004.

Figure 4. Proposed Mission Support Training Facility, Fort Wainwright, Alaska.



B. Alternative 2 – 'No Action'
Consideration of the No Action Alternative is required by NEPA. The No Action Alternative represents status quo. It provides a basis of comparison for the action alternatives and also addresses issues of concern by avoiding or minimizing effects associated with the Proposed Action. Under this alternative, none of the three projects would be constructed. This would, in effect, have the following mission consequences:

- continue deployment assembly at various locations in small unit environments, which creates deployment delays;
- continue housing enlisted soldiers in substandard, outdated facilities; and
- not implement simulation training that is consistent with modern Army strategies.

This alternative will be considered in the environmental consequences analysis.

C. Alternative 3 -'Upgrade old buildings'

Assembly Building: An alternative considering upgrading the old assembly building was considered. The old theatre building upgrade was rejected primarily due to its location. This building is not located near other training facilities and is in a residential area. Additionally, there is limited parking due to the surrounding structures and there would be a high cost associated with rebuilding the old theatre. This alternative has been removed from further discussion.

Barracks: An alternative considering upgrading the old barracks was considered. The old barracks buildings upgrade was rejected, however, because the old buildings, seismically, do not meet standards. The rebar connection between the floor and the beams is not up to current seismic standards (especially buildings 1001, 1004) and the cost to upgrade these buildings would be too great. This alternative has been removed from further discussion.

Mission Support Training Facility: An alternative considering upgrading another building to meet the need of the MSTF was considered. However, due to the size and uniqueness of the proposed building, no other buildings were found that could be upgraded to meet the MSTF objectives. This alternative has been removed from further discussion.

III. DESCRIPTION OF AFFECTED ENVIRONMENT:

A. Physical Factors:

1. Floodplains: The Fort Wainwright cantonment area is in the floodplains of the Chena and Tanana rivers. The Chena River Lakes Flood Control Project protects human settlements in the area, and proposed construction sites are protected from flooding by an earthen dam on the Chena River and a levee on the Tanana River (U.S. Army Corps of Engineers 2001).

None of the sites fall within the 100-year flood plain as protected by the Chena River Flood Control Project that was built by the Corps of Engineers and completed in 1992. All construction sites fall within the 500-year floodplain. Moreover, no practicable alternatives to placement of an Assembly, Barracks and MSTF Facility outside the floodplain exist. Compliance with Executive Order 11988, 1977, "Floodplain Management" is required in that no structures, appurtances, dikes or other impediments to natural floodwater flow shall be constructed in such a manner as to impede flow.

The closest flood channel is the much straightened and channelized Clear Creek that adjoins the Phase II Barracks Complex Project. This creek adjoins the south and west sides of the project. Appropriate engineering controls shall be applied to construction activities to preclude drainage degradation of this flood channel. Additional controls are listed in the mitigation section.

2. Water Quality: The Fort Wainwright cantonment area lies entirely within the Tanana River drainage basin. Depending on specific location, drainage may flow into several different rivers and creeks that feed the Tanana River system. A list of these rivers and creeks includes: Tanana River, Chena River, Flood Channel B, and the much altered and channelized Clear Creek. The most likely rivers to be affected by the construction of the assembly building, barracks and MSTF facilities are the Chena River and the Tanana River. All of the rivers have been classified as anadromous, (e.g., containing one or more species of salmon or arctic char). These systems have been classified as having good water quality. Generally, streams, creeks, ponds, lakes and rivers have pH values within ADEC standards. The Tanana River contains sediment loadings that will average between 300 mg/l during periods of high stream flow and 5 mg/l during quieter periods. Concerns for groundwater quality are contained in the *Administrative Record* of the Defense Environmental Restoration Activity (DERA) clean-up program being administered by the U. S. Army, the EPA and the ADEC for Fort Wainwright (USARAK 1994).

None of the proposed projects would directly impact surface or groundwater resources. A relatively flat topography and standard construction erosion control practices would protect surface waters from sedimentation. Pollution prevention (spill prevention, etc.) measures would be used to prevent ground water contamination during construction and building operation. Neither the Proposed Action nor its alternatives would have any effects on surface or ground water resources.

3. Geology, Topography: All of Fort Wainwright, including the training lands, comprises approximately 915,714.34 acres. The topography of the three specific project sites is a wide, flat plain of the historic Chena River floodplain. The area lies within the Tanana-Kuskokwim Lowland of the Western Alaska province that is characterized by alluvial depositions of both the Tanana and Chena rivers. Most soils in this Main Post area are Chena alluvium or Quaternary deposits characterized by shallow silt loam over gravelly sand or silt loam with sandy clay loams of widely variable texture. Soils adjacent to the rivers and tributaries have been classified by the U. S. Natural Resources Conservation Service as Salchaket Association.

The preferred alternative sites are characterized by prior disturbances associated with construction and use that date back to World War II. Additionally, discontinuous permafrost lies just under the surface in some areas. The unconsolidated silt-gravel mixture freezes perennially. It has a high bearing strength when frozen but is subject to sliding and is difficult to compact when thawed (Nakata Planning Group 1987). Additional information on Fort Wainwright soils is within the Integrated Natural Resources Management Plan (Natural Resources Branch 2002).

Virtually all three proposed construction sites are either directly on the footprints of former or present buildings (small structures) or show signs of previous surface disturbance. The flat topography generally precludes significant water erosion at all three sites.

4. Meteorology: Fort Wainwright has the northern continental climate of the Alaskan interior, characterized by short, moderate summers; long, cold winters; and little precipitation or humidity. Average monthly temperatures in Fairbanks range from –11.5° Fahrenheit (F) in January to 61.5°F in July, with an average annual temperature of 26.3°F. The record low temperature is –66°F, and the record high is 98°F. Average annual precipitation is 10.4 inches, most of which falls as rain during summer and early fall. Average annual snowfall is 67 inches (Natural Resources Branch 2002).

The Fairbanks area lies within a sub-arctic continental climatic zone. It is characterized by extreme diurnal shifts in available daylight, with extremes ranging from slightly more than 3 1/2 hours to more than 22 hours. Consequently, extreme temperature shifts are encountered, with extremes ranging from -70°F to +95°F. This area experiences low precipitation and low relative humidity. Average annual precipitation, including snowfall, is equivalent to approximately 11 inches, (equated to inches of rainfall). Average snowfall approximates 70 inches with a large loss due to sublimation. The wettest month is August with average rainfall of 1.68 inches and the driest is April with an average of 0.27 inches. Precipitation will average slightly higher at the higher elevations. Generally, the frost-free period runs from the third week in May until the end of August. The prevailing winds at Fort Wainwright characteristically come from the north during the winter months. During the summer, however, the winds originate from the southwest. Fairbanks has very mild wind conditions with average speeds around five knots. The greatest wind speeds are encountered during thunderstorm activity in the summer and blizzard conditions are rare. Interior Alaska weather is dominated by high-pressure weather systems 7 to 8 months of the year and by low-pressure systems during summer months. Construction of the Assembly, Barracks, and MSTF Facilities should not have any significant effect on the Fairbanks meteorology.

5. Noise: Average noise exposure over a 24-hour period is often presented as a community noise equivalent level (CNEL). CNEL values are calculated from hourly equivalent noise level values, with such values increased by 5 decibels (db) for the evening period (7 PM - 10 PM) and 10 db for the nighttime period (10 PM - 7 AM) (U.S. Army Corps of Engineers 2001).

The Department of Defense evaluates the acceptability of noise levels at military installations according to three noise level zones for routine noise (*e.g.*, aircraft and small arms) (*i.e.*, Zone I

- CNEL levels below 65 db, Zone II - 65-75 db, Zone III - above 75 decibels) and three noise levels for impulsive noise (blast noise, such as artillery) (*i.e.*, Zone I - CNEL levels below 62 db, Zone II - 62-70 db, Zone III - above 70 db). All types of land uses are considered compatible with Zone I noise levels. Educational and residential land uses generally are not compatible with Zone II noise levels unless special acoustic designs and features are used to ensure acceptable interior noise levels. Residential and educational land uses are not compatible with Zone III noise levels. Industrial and manufacturing land uses may be acceptable in Zone III if special building designs and other features are implemented.

6. Air Quality: Fort Wainwright is classified as a Prevention of Significant Deterioration (PSD) major facility as defined in:

(1) 18 AAC 50.300(c)(1) because it has the potential to emit more than 250 tons per year of a regulated air contaminant in an area classified as attainment or unclassifiable;

(2) 18 AAC 50.300 (c)(2)(A) because it has the potential to emit more than 100 tons per year of a regulated air contaminant in an area designated attainment or unclassifiable and is a fossil-fuel-fired steam electric plant of more than 250 MMBtu/hr; and

(3) 18 AAC 50.300(c)(2)(V) because it has the potential to emit more than 100 tons per year of a regulated air contaminant in an area designed attainment or unclassifiable and is a fossil-fuel-fired boiler or combination of boilers totaling more than 250 MMBtu/hr.

Fort Wainwright is also classified as a nonattainment area major facility as defined in 18 AAC 50.300(d) because it has the potential to emit more than 100 tons per year of a regulated air contaminant, carbon monoxide (CO), in an area classified as nonattainment for that contaminant.

Currently, Fort Wainwright has to comply with permit conditions outlined in the state issued Air Quality Control Permit to Operate #9331-AA003 and permit conditions identified in the Title V Operating Permit Application, and Air Quality Construction Permit #0031-AC059 which were consolidated into a revised title V Operating Permit Application and submitted to the ADEC for review in October 2001. The Title V Operating Permit Program as outlined in the 1990 Clean Air Act Amendments (CAAA) requires source owners with air pollutant emissions exceeding major source thresholds to obtain a Title V Operating Permit. The Title V major source threshold for all criteria air pollutants (CAPS) is a calculated potential to emit of 100 tons per year (TPY). The major source threshold for an individual hazardous air pollutant (HAP) is 10 TPY or a combined limit for multiple HAPs of 25 TPY. Under this set of regulations, Fort Wainwright has been determined to be a major source for CAPS and HAPS and must comply with these requirements. In December 1997, Fort Wainwright submitted a Title V Operating Permit Application.

The National Ambient Air Quality Standards (NAAQS) are health-based standards, and were established by the EPA to protect human health and the environment. Major source thresholds can vary depending upon the type of pollutant, as well as the local NAAQS attainment status.

Fort Wainwright is located in an area that is in nonattainment for CO, but in attainment for all remaining NAAQS.

The proposed assembly building, barracks, and MSTF sites have been evaluated to determine if their proposed location is within the non-attainment area for CO. The barracks project is the only site that falls within the boundary of the CO nonattainment area of the Northern Alaska Intrastate Air Quality Control Region. Periodic nonattainment episodes are typically experienced during the winter months during periods of strong inversions, which usually occur during the winter and spring months.

Arctic haze is another factor that impacts the air quality in Fairbanks. Industrial pollutants from Europe and Asia are transported across the Arctic Ocean and produce an effect known as 'arctic haze'. During this event, pollutant sulfate may be boosted by 0.68 micrograms per cubic meter (Rahn 1982). During these episodes, the concentration of vanadium, a combustion product of fossil fuels that averages up to 20 times the background levels may be found in the air and snow pack (AKDOT 1992). Recent analysis of the Canadian Arctic snow pack chemistry also indicates the long-range transfer of small concentrations of organochlorine pesticides (Gregor and Gummer, 1989). It can be expected that this 'arctic haze' condition has a minor contribution to the overall contamination of the air in the Fairbanks vicinity; however, local air emission standards still need to be closely monitored.

The General Conformity Rule (40 CFR 93, Subpart B) applies to Fort Wainwright because it is located in an area designated as a CO nonattainment area. Any Federal action within a nonattainment area or maintenance area must not hinder attainment of the NAAQS or impede local efforts to control air pollution. The intent of compliance with this regulation is to make a demonstration that Federal actions "conform with" the approved State Implementation Plan for the geographical area. As part of the air quality impact analysis for this project Fort Wainwright must evaluate this action to ensure compliance with the regulatory provisions of the General Conformity Rule. If impacts are identified, mitigation measures must be identified and included in the Conformity documentation for the project. There will be no new combustion units added to the Fort Wainwright inventory, either in the form of boiler or generator units. Increased vehicle emissions associated with construction equipment would be of a temporary nature.

(a) *Refrigeration/Air Conditioning:* The new barracks building will have small apartment sized refrigerators and may contain air conditioning systems. No degradation to air quality is expected from the use and installation of these refrigeration and air conditioning units. All units using refrigerant as a cooling agent must comply with the regulations under 40 CFR 82.

(b) *Standby Steam:* No steam boilers will be installed at the barracks building. The building will use steam from the existing utilidor connected to Central Heat and Power Plant (CHPP), Fort Wainwright for primary heat. In addition, no provisions for an emergency backup heating system are part of the project.

(c) *Standby Electricity:* Electricity will come from the CHPP, with emergency power provided by backup batteries. Emergency standby generators will no be utilized at this location.

(d) *Laundry Facilities:* The new barracks building will contain laundry facilities. The facility will not have any dry cleaning capability. Laundry wastewater will be discharged to the Fort Wainwright sewer system and ultimately to the Golden Heart Utilities Treatment Plant. There will be no adverse environmental or water quality impact expected from this activity.

The project will have little to no impact on existing air quality in the Fort Wainwright area. A Record of Non-Applicability (RONA) was completed for the barracks site, the only project within the CO non-attainment area (see Appendix B). The assembly building and MSTF facilities were evaluated for new air emission impacts. There are no new air emission impacts identified for these two projects. A comprehensive RONA covering stationary and mobile source vehicle emissions can be found in the EA entitled "Construction for the Alert Holding Area and Pallet Processing Facility, Fort Wainwright, Alaska", August 2002.

7. Hazardous Waste/Materials: All of Fort Wainwright was listed on the Environmental Protection Agency's National Priorities List on August 30, 1990 under the Comprehensive Environmental Response, Compensation and Liability Act of 1980. In spring 1992 the Army, Environmental Protection Agency, and the Alaska Department of Environmental Conservation signed a Federal Facility Compliance Agreement, which requires a thorough investigation of suspected hazardous waste source areas and remediation actions to protect public health. USARAK is in the process of clean-up activities under an Installation Restoration Plan for Fort Wainwright (U.S. Army Corps of Engineers 2001).

Assembly Building: Soil boring data was found in the general area surrounding building 3438. and can be obtained through USARAK environmental administrative file. The Utilidor Expansion Drum 'No Further Action' Site is located to the east of the assembly building proposed project location.

Barracks: Soil boring data was found in the general area surrounding building 3206 and can be obtained through USARAK environmental administrative file. There are no known underground/aboveground storage tanks 9 (UST/AST). There are no wells, or institutional controls for the barracks location.

Mission Support Training Facility: Soil boring data was found in the general area adjacent to buildings 3440 and surrounding buildings 3438, 3485 and can be obtained through USARAK environmental administrative file. Contamination has been identified and institutional controls are in place at the area surrounding building 3438 (to the immediate south of the proposed MSTF site location).

B. Biological and Ecological Factors:

1. Landuse: Land use in the area of the three project sites is highly developed and consists of warehouses, a steam plant, offices, barracks, parking areas, runways, and a commissary (U.S. Army Corps of Engineers 2001). Aesthetically, the preferred alternative sites are in previously disturbed areas in heavily developed zones.

The alternative site locations are classified as permanent withdrawn land or fee simple land. Adjacent land is designated as Fort Wainwright withdrawn lands. The adjoining military lands are designated in master plans as a military maneuver area. Other adjoining lands are federal, state, ANILCA native land withdrawals, and private lands.

a. *Vegetation:* Fort Wainwright generally has been characterized by heavy vegetation of high brush, bottomland spruce/poplar forest consisting of black spruce, tamarack, birch, quaking aspen, poplar, willow, low bush cranberry, mosses and sedges; and lowland spruce/poplar forest. Under story vegetation consists of moss, brush and grasses on the lower slopes with willow and alder found in the uplands.

When Fort Wainwright was initially developed, all soils were removed from the proposed site. Regrowth at the preferred alternative site location consists of primary succession plants (those that do well in a gravelly or heavily disturbed substrate), and invasive species. Primary succession vegetation includes fireweed, strawberries, dandelions, pussytoes and some willow shoots. A complete listing of plant species is located in Fort Wainwright's Integrated Natural Resources Management Plan (USARAK 1999). The preferred alternative site contains no timber that is of commercial quality and/or quantity.

b. *Wetlands:* The USFWS National Wetlands Inventory Program has classified a small percentage of the Fort Wainwright cantonment area as wetlands. The U. S. Army Corps of Engineers (USACE) Regulatory Branch has confirmed this classification. Wetlands are most commonly found in the alluvial valley floors that are underlain by permafrost. The Federal Clean Water Act protects wetlands and other aquatic ecosystems from adverse impacts.

On-site investigation for the MSTF and Assembly building show that there are no wetlands located on this site. On-site investigation for the Barracks Complex, Phase 2 shows that there are pockets of wetland intermixed with the upland. These areas of wetland are too small to be mapped (<5 acres each) and therefore do not show up in the wetland database. Upon completion of the design, the wetland area on the Barracks Complex, Phase 2 site will be delineated and a USACE permit application will be submitted by the DPW Environmental office. No mechanical clearing of the site or construction on the site will begin until the permit has been issued by the Corps of Engineers regulatory office.
Riverine and wetland habitats in the region are abundant and permafrost occurs in much of the undeveloped areas. The Chena River Lakes Flood Control Project was completed in 1979 by the USACE to protect human settlements in the floodplain. An earthen dam on the Chena River and a levee on the Tanana River reduce the likelihood of flooding onto the project site and adjacent lands.

c. *Fish and Wildlife:* The Chena River is an important fishery for salmon and has additional populations of northern pike, grayling, various whitefish, and burbot, along with numerous prey species.

Significant fish and wildlife populations and habitats occur at Fort Wainwright outside the project area. The Chena River drainage supports anadromous and resident fishes important to recreational and subsistence fisheries. These include king salmon, chum salmon, sheelfish, grayling, burbot, and whitefish. Spruce forests, muskeg, and tundra habitats support a variety of mammals including moose, wolf, grizzly and black bear, lynx, snowshoe hare, and beaver. Migratory waterfowl use the Tanana Flats Training Area for breeding, feeding, and resting habitats. Other common birds include willow ptarmigan, common snipe, sandhill crane, and spruce and ruffed grouse. Hunting of moose, bear, and waterfowl occurs in the larger tracts of land, such as the 259,000-acre Yukon Training Area, and the 642,000-acre Tanana Flats Training Area. Furbearers are also trapped.

No significant populations of fish and wildlife would be impacted by the project because the project is in a highly developed area.

d. *Endangered species:* Threatened and endangered species are protected under the Federal Endangered Species Act. Formal coordination with the United States Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act of 1973 is not required. Endangered and threatened species do not use the project site or surrounding areas. However, delisted species that occupy habitat outside the project area include the Arctic peregrine falcon (*Falco peregrinus tundrius),* and American peregrine falcon (*Falco peregrinus anatum*). There are three known American peregrine falcon nests in the vicinity of the Salcha River that lies east of the Yukon Maneuver Area near Eielson AFB. Arctic peregrine falcons migrate throughout the area. The bald eagle also occurs in suitable habitat in the surrounding area and is protected by the Bald and Golden Eagle Protection Act. Additionally, swallows (protected by the Federal Migratory Bird Protection Act) tend to nest in the roofs of buildings at Fort Wainwright during the summer months.

C. Cultural, and Socioeconomic Factors:

1. Socioeconomic: Fort Wainwright is located within the census district of the Fairbanks North Star Borough. Military demographics affect local census data, largely due to a younger, more ethnically diverse military population. Fort Wainwright and Eielson Air Force Base, combined, is the largest employer in the Borough. Directly or indirectly, about 45% of the total Borough employment is dependent upon military employment (Center for Ecological Management of Military Lands undated).

2. Cultural/Historic Resources: There are two historic districts on Fort Wainwright that have a listing in or are determined eligible for listing in the National Register of Historic Places (NRHP). In addition, there are two buildings that have been determined eligible for listing in the NRHP on their own merit. No archaeological sites have been found in the project area. The project area has a low probability for containing such sites.

Fort Wainwright was initially established in 1939 as a cold weather test facility under the name of Ladd Field. With the outbreak of World War II, Ladd Field became a significant facility not only in the cold weather testing but also in support of the Aleutian Campaign and the Lend-Lease program. In recognition of Ladd Field's nationally significant role it played in World War II, it was designated as Ladd Field National Historic Landmark (NHL) in 1984. This NHL is centered on the runways and has 37 contributing buildings and structures.

Following World War II and the formation of the U.S. Air Force in 1947, Ladd Field became Ladd Air Force Base. From 1947 to 1961 exceptionally significant missions were directed and flown out of Ladd Air Force Base during the Cold War. In recognition of this exceptional significance a historic district has been determined eligible for listing in the NRHP. Ladd Air Force Base Historic District contains 71 buildings and structures that contribute to it. In addition to this historic district, Buildings 4069 and 4070 have been determined eligible for listing in the NRHP for their association with the Arctic Aeromedical Laboratory.

In 1961 the Air Force moved to Eielson Air Force Base 26 miles east of Fairbanks. Ladd Air Force Base was transferred to the U.S. Army and renamed Fort Jonathan Wainwright.

There are known archaeological and historical resources in the adjoining lands of Fort Wainwright as previously evaluated and reported in, *Archeological Survey and Inventory of Cultural Resources at Fort Wainwright, Alaska* and the *Sixth Infantry Division (Light) Historic Preservation Plan for U. S. Army Lands in Alaska* (AHRG 1986, Dixon et al 1980). In the event that artifacts are discovered, all activities at the site shall be halted and the Public Works Environmental Office notified at 353-6249.

Historic and archeological resources have been inventoried and evaluated for each of the proposed construction sites. No significant cultural resources are known for these sites. USARAK would coordinate with Army Airfield Operations for flight safety concerns and compliance with all airfield safety criteria for all demolition, construction, or related activities. Additionally the *Installation Design Guide* shall be consulted as to design guidance for the distinguishable areas of Fort Wainwright (Higginbotham/Briggs & Associates 1991). Appendix A includes consultation letters between USARAK and the Alaska State Historic Preservation Officer. The consultation meets USARAK obligations under Section 106, National Historic Preservation Act of 1966 (as amended, PL 89-665; 16 USC 470 *et seq.*). USARAK has also prepared a Memorandum of Agreement for the proposed action (see Appendix A).

3. Roadway Traffic: Fairbanks is a transportation center for much of central and northern Alaska, providing trucking services, rail facilities, highways, and commercial and private air services. The Richardson Highway, Parks Highway, and the Steese Expressway are major routes serving the region. Fort Wainwright contains 28 miles of paved roads (with widths of 24 to 32 feet). Besides the Richardson Highway, the primary paved roads servicing Fort

Wainwright are Gaffney, Montgomery, Ketcham, Neely, River, Meridian, and Santiago. Paved and gravel roads, and bridges at Fort Wainwright are generally in good condition.

Fort Wainwright traffic is generated by residents, visitors, and by more than 9,600 military, civilian, and vendor personnel. Normal weekday work hours begin at 0600 hours and peak hours are 0700 to 0900, 1200 to 1400, and 1600 to 1800 hours. Intersections within the main fort area generally operate at acceptable levels even during the weekday morning and evening peak hours. However, traffic can become congested during peak hours on Gaffney Road from the main gate to Montgomery Road.

4. Environmental Justice: Executive Order No. 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* [59 Federal Regulation No. 32], issued in February 1994, provides that "*each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations*". The Proposed Action and its alternatives would be confined to Army-owned land, and construction acquisition actions would comply with federal acquisition regulations. Neither the Proposed Action nor its alternatives would have significant or disproportionate adverse effects on minority or low-income populations.

5. Environmental Health and Safety Risks for Children: Executive Order No. 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, [62 Federal Regulation No. 78] was issued in April 1997. This Executive Order directs each federal agency to "*ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health or safety risks*". Sensitive areas for exposure to children at Fort Wainwright are schools and family housing areas. Environmental health and safety risks are attributable to products that a child might come in contact with or ingest as well as safety around construction areas and areas of buildings that pose safety hazards. Proposed projects are within the administration area of Fort Wainwright. Construction and operation of these projects would comply with federal safety standards. Neither the Proposed Action nor its alternatives would have significant or disproportionate adverse effects on children or pose health or safety risks.

IV. ENVIRONMENTAL IMPACTS FROM THE PREFERRED ACTION AND ALTERNATIVE

A. Geology, Topography:

Soil disturbance would occur during construction, but best management practices to control erosion, such as the use of silt fences, would be used to ensure soils do not erode from the site or enter waterways. Special foundation work would address seismic and permafrost engineering design requirements. There is no known contamination of soils on proposed sites. If contamination were discovered during preconstruction or construction, appropriate soil remediation would be implemented. Remediation methods would be agreed upon by the U.S.

Army, U.S. Environmental Protection Agency, and the Alaska Department of Environmental Conservation. Standard spill prevention measures would be taken during construction and operation of the buildings. Proposed construction would not have any effects on soils beyond construction sites, which have a history of disturbance.

B. Noise: Proposed project sites are located within an area identified as less than 58 db (Zone I) within the Environmental Noise Management Plan (Montgomery Watson Harza 2001). Proposed projects (assembly building, barracks, classrooms), when completed, would be compatible with existing noise levels.

During construction, noise would sometimes exceed Zone I criteria in the immediate vicinity of the construction. This temporary noise would not go beyond the immediate area and would not impact lands off Fort Wainwright.

C. Air Quality: The operation of heavy equipment during construction of the three projects would release carbon monoxide into the air. Heavy equipment sources of carbon monoxide would not impact air quality during the critical winter season when the potential for an inversion is present.

Operation of the facilities would result in additional energy consumption (heat, electricity, etc.). However, the additional emissions associated with increased energy production should have little impact on existing air quality in this area and would be mitigated by the improved efficiency and heat retention capability of the proposed new barracks.

D. Biological Resources: Relatively poor, often disturbed wildlife habitat would be disturbed or removed at project sites. Aquatic species in the Chena River, which drains the sites, would be protected by erosion control and pollution prevention efforts during construction. No federal- or state-listed wildlife or plant species would be affected. Based on an initial investigation, no wetlands would be affected by any of the projects or their alternatives. Neither the Proposed Action nor its alternatives would affect wildlife-based recreation (hunting, fishing, trapping, etc.).

E. Hazardous Waste: Any discovery of hazardous material contamination would require appropriate regulatory coordination and compliance. Construction digging has the potential to expose contaminated soil from historic use of sites. Any discovered contaminated soils during construction would be remediated using methods agreed upon by USARAK, Environmental Protection Agency, and the Alaska Department of Environmental Conservation. Facility operation is not anticipated to generate hazardous wastes beyond those small quantities typical of such facilities (paint, cleaners, etc.), which would be disposed of according to standing operating procedures, consistent with compliance requirements.

Neither soil nor groundwater would be removed from construction sites without written authorization from an authorized USARAK representative. All operations involving hazardous waste would be accomplished in accordance with USARAK Regulation 200-4, *Environmental Quality: Hazardous Waste, Used Oil, and Hazardous Materials Management.*

F. Socioeconomic: The Proposed Action would result in about $85 million for design and construction of proposed facilities. Most of this money would be spent in the Fairbanks Borough. Construction could temporarily increase population and employment levels, particularly in warmer months when it is common practice for construction workers to temporarily move to Alaska. Operation of the facilities would not significantly permanently impact demographic numbers or characteristics since such operation does not significantly impact military or civilian employment at Fort Wainwright. The Proposed Action would not affect public facilities, utilities, transportation systems, or services.

V. CUMULATIVE IMPACTS

Cumulative impacts are defined (under Army Regulation 200-2, 651.16) as impacts on the environment resulting from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. Cumulative effects can result from individually minor but collectively significant actions taking place locally or regionally over a period of time. Fort Wainwright's training lands, in combination with neighboring lands, can be viewed as a generally stable, well-managed natural system surrounded by areas of varying levels of growth and development. If Alaska is chosen as an Army transformation site during 2002-2006, USARAK could encounter a significant change in military mission.

A. Cantonment Area Development: The Fort Wainwright cantonment area (Main Post), by definition, is the preferred location for the industrial, administration, classroom-oriented training, housing, airfield, etc. activities on the installation. Modernization and facilities upgrade requirements will continue as will military mission requirements for classroom-oriented training. Thus, facility replacements and additions/demolitions will continue on a regular basis, as they have in the past. Due to rapidly changing technology, military tactics and strategy, and world events affecting military activities, it is difficult to predict these changes beyond general cantonment area development.

Numerous projects are planned in the vicinity of the Fort Wainwright cantonment area. While these projects are independent of the proposed action described in this EA, it is nevertheless appropriate to consider impacts associated with the preferred and other alternatives in light of these independent projects.

The Proposed Action is another action in this process. The three projects continue the development of the cantonment area, which is a cumulative impact. However, this development is planned, has minimal environmental impacts, adequate mitigation, and is required to support the USARAK military mission at Fort Wainwright.

B. Military Mission Evolution: The USARAK military mission can be expected to continue to evolve, in some cases relatively dramatically, as the U.S. armed forces evolve in terms of military units, military equipment, and tactics/strategies change to meet changing threats to U.S. security. Such changes are expected to continue in the future. However, the nature of these

changes with respect to changes at Fort Wainwright is difficult to predict due to rapidly changing technology, military tactics and strategy, and world events affecting military activities.

Two proposed projects (assembly building and MSTF) are examples of changes in deployment (assembly building) and computerized simulation training requirements (MSTF) requirements that would result in additional facilities at Fort Wainwright. However, these projects are environmentally benign in terms of significant impacts compared to more field-oriented military mission evolvement (new ranges, new tactics, etc.). They would not cumulatively impact environmental resources except for some reductions in field training due to simulation training associated with the MSTF. Impacts from reduced field training would be positive.

3. Specific Site Impacts: Soils, air quality, and vegetation impacts, regardless of how insignificant they are for the proposed projects, would be cumulative. Even when soils are stabilized following construction, there would be slightly fewer areas with natural soils in the cantonment area. This impacts vegetation in a similar fashion; however, most vegetation affected has already been degraded from its natural condition and composition. Regardless of the efficiency of operating the proposed facilities, there would be slightly more energy required by Fort Wainwright, which would result in slightly more emissions from the central energy plant. USARAK would obtain any required energy plant permit modifications.

Although growth and development can be expected to continue outside of Fort Wainwright and the surrounding natural areas, its environmental effects, although possibly somewhat adversely affecting natural resources within the ecoregion, would not be expected to result in cumulatively adverse effects to these resources when added to the effects of the proposed action.

VI. SUMMARY OF EFFECTS AND CONCLUSIONS

A. Unavoidable Adverse Effects Should the Proposed Action Be Implemented

Some adverse effects due to construction cannot be avoided if the Proposed Action is implemented. Disturbance and some removal of soils would occur, but affected soils have a history of disturbance, and many portions of sites are on areas previously or currently occupied by facilities. Short-term noise and air quality degradation would occur during construction, but neither would be significant or long-term. Some low quality habitat would be lost on construction sites. Visual resources would be temporarily impacted during construction; however, completed buildings and the demolition of old housing would improve cantonment area aesthetics. There is a potential for the generation or discovery of hazardous waste or materials; such waste or materials would be disposed of or remediated according to compliance requirements.

The below table summarizes potential effects for each alternative. Environmental effects would not be significant within the larger geographic and temporal context in which they would take place given the above-mentioned mitigation measures are enforced.

Table 1. Summary of Potential Environmental Consequences

Resource Area	Environmental Consequence*	
	No Action Alternative	**Proposed Action**
Geology	No effect	No effect
Soils	No effect	Negative on construction sites
Water Resources	No effect	No effect
Air Quality	No effect	Slightly negative during construction, minor impacts during operation
Noise Environment	No effect	Slightly negative during construction
Biological Resources	No effect	Slightly negative for poor quality habitat
Floodplains and Wetlands	No effect	No effect
	No effect	Second Delineation needed
Cultural Resources	No effect	No effect
Hazardous Waste/Materials	No effect	Potential for mitigated effects
Visual Resources/Aesthetics	No effect	Negative during construction; positive after construction
Socioeconomic Environment	No effect	Beneficial during construction
Environmental Justice	No effect	No effect
Protection of Children	No effect	No effect
Cumulative Impacts	No effect	Slightly negative for soil, air, and vegetation

* No effect: Actions have no known demonstrated or perceptible impacts
Beneficial: Actions have apparent beneficial effects
Negative: Actions have apparent negative effects

The Proposed Action would involve no irreversible or irretrievable commitment of resources other than the consumption of various expendable materials, supplies, and equipment associated with construction.

VII. MITIGATION

As defined in CEQ Regulation 1508.20, "Mitigation" includes the following: Avoiding the impact altogether; Minimizing impacts by limiting the degree or magnitude of the action; Rectifying the impact through repairing, rehabilitating, or restoring; Reducing or eliminating

the impact over time by preservation and maintenance operations; Compensating for the impact by replacing or providing substitute resources or environments. To provide further environmental protection, specific mitigation measures will be strictly enforced. Assembly, Barracks and MSTF facility mitigation will be addressed prior to construction.

A. Architecture: Comply with the scope and design criteria of DOD 4270.1-M, "Construction Criteria," that were in effect 1 January 1987, as implemented by the Army's Architectural and Engineering Instructions (AEI), "Design Criteria," dated 3 July 1994.

B. Engineering: Ensure that arctic engineering concepts are incorporated into facility design that will preclude vapor barrier, warm roof, and other common problems unique to this environment. Insure that adequate insulation is incorporated into the facility design to reduce excessive use of fossil fuels for facility heat. Ascertain that appropriate engineering safeguards are incorporated to ensure Clean Water Act compliance. Due to the harsh winter conditions typical of the region, it is essential that certain functions of the Assembly Building, Barracks and MSTF be performed within a well-heated and ventilated area.

C. Snow Removal: Incorporate snow removal operations into the facility design. Ascertain that snow avalanches from roofs will not occur in the area of entryways, parking lots, or emergency service areas. Set aside areas in the immediate vicinity of parking lots as temporary snow removal repositories.

D. Soils: Stabilize exposed soils and manage storm water runoff using seeding, hay bale placement, siltation fence techniques and other appropriate engineering controls. Reseed all grassy areas disturbed during construction. Develop a storm water pollution control plan and implement best management practices in effort to control erosion and stabilize exposed soils. Soil will be screened during geophysical investigations for contamination. If contaminated soil is discovered, proper containment and remediation would occur, in coordination with the ADEC and EPA.

Soil and groundwater will not be removed from any part of Fort Wainwright without written authorization from an authorized USARAK representative. All operations involving hazardous waste will be accomplished in accordance with USARAK PAM 200-1, Hazardous Materials and Regulated Waste Management (USARAK 2000). Environmental Quality: Hazardous Waste, Used Oil, and Hazardous Materials Management.

E. Parking lot: Parking lot design shall provide adequate clear space on the margins for snow deposition during snow removal operations. These sites shall not be within 50 feet of any wetland, water body, creek, slough, or river. As an alternative, appropriate settling basins, diversion dikes or other engineering practices shall be incorporated into the design to insure compliance with the National Pollutant Discharge Elimination System (NPDES) criteria for both rainfall run-off and snowmelt. Parking lot design shall minimize obstructions, as the design process permits, to facilitate the orderly and efficient snow removal and transport by DPW typical equipment.

F. Air Quality: Currently the ADEC prohibits vehicles from idling more than three minutes in the Fairbanks non-attainment area. This prohibition will be enforced post-wide. If necessary, additional vehicle head bolt outlets will be provided for non-tactical vehicles to minimize the number of cold starts during periods of extreme cold weather and thereby reduce the amount of exhaust discharges from vehicles. EPA's MOBILE 6 model will be run to determine the ambient air impacts associated with processing 1,660 vehicles through the proposed facilities within a 96-hour time frame during the winter months. This scenario is assumed to represent the worse case scenario for vehicular processing and resultant pollutant emissions.

G. Floodplains: Apply engineering controls to construction activities to preclude drainage degradation of this flood channel. Design culverts to handle maximum flood flow. Incorporate thawing provisions in culvert design to initiate flow during spring break-up. Incorporate engineering controls into facility and parking lot designs to preclude storm water run-off into Clear Creek. Include settling Basins, grass lined swales, or other engineering design features into facility design to preclude NPDES violations.

VIII CONCLUSION

Construction of new Assembly Building, Barracks and MSTF facilities as described in the preferred and other alternatives does not pose any significant environmental impacts that are not otherwise adequately addressed in the mitigation section of this EA. The No Action Alternative would not address the increasing need for new facilities. The military member population in the interior of Alaska needs more efficient deployment operations to meet the Army's mission. After a comprehensive evaluation of all potential impacts, it has been determined that the proposed action will not result in significant impacts; therefore a Finding of No Significant Impact (FNSI) will be prepared to accompany this EA. Mitigation measures contained herein shall be incorporated in their entirety into any Work Plan, Operations Plan or similar document that anticipates the construction of new Assembly Building, Barracks, and MSTF facilities at Fort Wainwright as outlined in this Environmental Assessment.

IX CONTACTS

A. Environmental Assessment Preparers/Editors

The United States Army Alaska, Directorate of Public Works, Environmental/Natural Resource Division and Gene Stout and Associates, Loveland, Colorado prepared this environmental assessment. Below is a list of contact personnel who either prepared or edited this assessment.

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Farris, Ann - ADEC Solid Waste Program - 451-2156
Sousa, Patrick – U.S. Fish/Wildlife, Fairbanks– 456-0203

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XI COMMON ABBREVIATIONS:

ACM	Asbestos Containing Material
ADEC	Alaska Department of Environmental Conservation
AQCR	Air Quality Control Region
ANILCA	Alaska Native and Indian Land Claims Settlement Act
AK	Alaska
BASH	Bird Aircraft Strike Hazard. A program to minimize potential of bird/aircraft conflicts in the vicinity of airfields and landing zones.
CFR	Code of Federal Regulations
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980, also known as *Superfund* (PL 96-510 et seq.)
CNER	Community Noise Equivalent Level
CRREL	Cold Regions Research and Engineering Laboratory, headquartered in Hanover, NH.
db	decibel
DoD	Department of Defense
DOTPF	State of Alaska, Department of Transportation and Public Facilities
DMA	Defense Mapping Agency
DPW	Directorate of Public Works
DERA	Defense Environmental Restoration Act. The DOD equivalent to
CERCLA	(see above)
EA	Environmental Assessment, See Army Regulation 200-2 (32 CFR-Part 651)
E.O.	Executive Order. A binding order issued y the President of the United States.
EPA	Environmental Protection Agency, Region X, headquartered in Seattle, WA
F	(Fahrenheit), a temperature measurement scale wherein water freezes at 32 degrees and boils at 212 degrees.
FFA	Federal Facilities Agreement. A legally binding agreement administered by the EPA that specifies *Superfund* (see CERCLA above) clean-up activities, schedules and specifies levels of 'clean'.
FWA	Fort Wainwright, Alaska
IRP	Installation Restoration Plan. The required actions for the long term clean up of *Superfund* known contamination throughout Fort Wainwright, Alaska
NPDES	National Pollution Discharge Elimination System

MIM	Military Installation Map
MSTF	Mission Support Training Facility
mg/l	Milligram per liter (approximates one part per million)
RCRA	Resource Conservation and Recovery Act
Superfund	See CERCLA above.
US	United States
USA	United States Army
USARAK	United States Army, Alaska
USFWS	United States Fish and Wildlife Service

XII. APPENDIX A
CORRESPONDENCE

APPENDIX A.- Section 106, National Historic Preservation Act Consultation for Assembly Building

DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY GARRISON, ALASKA
600 RICHARDSON DRIVE #5000
FORT RICHARDSON, ALASKA 99505-5000

25 FEB 2002

Reply To:
APVR-RPW-EV

Judith E. Bittner
State Historic Preservation Officer
550 W. 7th Avenue, Suite 1310
Anchorage, AK 99501-3565

Dear Ms Bittner:

This is to request your concurrence with U.S. Army Alaska (USARAK) finding of No Historic Properties Affected by the construction of an Assembly Building on Fort Wainwright, Alaska. This project is proposed for an area northeast of Building 3438 and approximately ¾ miles south of the Ladd Field National Historic Landmark boundary (see attached map). The proposed building is needed for command briefings, deployment briefings, chain instruction and for workforce meetings. It will provide a facility large enough for command information opportunities and soldier/workforce awareness and education opportunities.

The project site is undeveloped covered by black spruce. Buildings 3424 and 3438 were constructed in the early 1990s to accommodate training. Buildings 3496 and 3494 are buildings constructed in the late 1950s by the U.S. Air Force as vehicle maintenance and warehouse facilities. These uses continue today. The collection of buildings to the west of the project area consists of barracks constructed in the mid-1950s by the U.S. Air Force. The buildings continue to be used as such.

Buildings 3424 and 3438 do not meet Criteria Consideration G for buildings less then 50 years old. These buildings have not achieved exceptional importance and are not eligible for inclusion in the National Register of Historic Places. The remaining buildings around the site also do not achieve exceptional importance for properties less then 50 years old. These buildings were ancillary to the Ladd Air Force Base Cold War missions for which the Ladd Air Force Base Historic District achieves its eligibility for inclusion in the National Register of Historic Places.

If you require additional information, contact Russell Sackett at 384-3041.

Sincerely,

David B. Snodgrass
Colonel, U.S. Army
Director, Public Works

No Historic Properties Affected
Alaska State Historic Preservation Officer
Date: 3/1/2002
File No.:

APPENDIX A.- Section 106, National Historic Preservation Act Consultation for MSTF Building.

TONY KNOWLES, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF PARKS AND OUTDOOR RECREATION
OFFICE OF HISTORY AND ARCHAEOLOGY

550 W. 7TH AVENUE, SUITE 1310
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File No.: 3130-1R Department of the Army

February 12, 2002

David B. Snodgrass, Colonel U.S. Army, Director Public Works
Department of the Army, Headquarters U.S. Army Alaska
600 Richardson Drive #5000
Fort Richardson, Alaska 99505-5000

Subject: Rehabilitation of Building 2295

Dear Col. Snodgrass:

The Alaska State Historic Preservation Office reviewed Department of the Army correspondence and attachment – *Map 1: Project Location Building 2295* - received January 31, 2002 regarding the subject referenced above.

The Alaska State Historic Preservation Office concurs with Department of the Army finding no historic properties affected by the undertaking to rehabilitate Building 2295 (ca. 1990).

Thank you for your assistance in this matter. If you have questions or require further information, please contact James J. Malanaphy III, AIA (907) 269-8726.

Sincerely,

Judith E. Bittner
State Historic Preservation Officer

JEB:jjm

cc: Russell Sackett, Cultural Resource Manager (APVR-RPW-EV)
Fairbanks North Star Borough - City of Fairbanks Historical Commission

Appendix A. Section 106-NHPA Consultation for Barracks Construction

DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY GARRISON, ALASKA
1060 GAFFNEY ROAD # 6000
FORT WAINWRIGHT, ALASKA 99703-6000
April 6 1999

Post Commander

SUBJECT: Section 106 Consultation Demolition of Buildings 3200, 3201 and 3204

Ms Judith Bittner
State Historic Preservation Officer
State of Alaska
Department of Natural Resources
Division of Parks and Outdoor Recreation
3601 "C" Street, Suite 1278
Anchorage, Alaska 99503-1278

Dear Ms Bittner:

This letter is pursuant to compliance with the National Historic Preservation Act Section 106 for Ladd Field National Historic Landmark; the U. S. Army in Alaska (USARAK) is referring the following matter to you for further action.

USARAK is re-requesting to demolish Buildings 3200, 3201 and 3204 [former ammunition igloos] on the south side of the airfield in the vicinity of the Flight Simulation Center, Bldg. 3000. These igloos are contributing elements to the Ladd Field National Historic Landmark/District; matters are such that we re-request demolition. This letter is to initiate Section 106 consultation and to solicit your advice and suggestions.

The Headquarters proposes the demolition of these former ammunition igloos as part of the Army imposed facility reduction program, and to accommodate the construction of a proposed new barracks facility. The potential for incorporating these igloos into the planned new barracks construction has been thoroughly examined and proved to be neither practicable nor feasible. The Corps of Engineers has provided new barracks design copies to your office to aid in your determination. Specific questions concerning new barrack construction encroachment on the igloo footprint should be addressed to Mr. Dennis Holtry at 353-6243.

Appendix A. Section 106-NHPA Consultation for Barracks Construction

Advisory Council On Historic Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

Reply to: 12136 West Bayaud Avenue, #330
Lakewood, Colorado 80226

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OHA

May 29, 2001

Richard G. Thompson
Colonel, U.S. Army
HQ, U.S. Army Alaska
600 Richardson Drive #5000
Fort Richardson, AK 99505-5000

RE: *Adverse Effect Notice regarding the demolition of Cold War era housing on Fort Wainwright, AK*

Dear Colonel Thompson:

We have reviewed your notification and supporting documentation regarding the adverse effects of the proposed demolition of Buildings 1027, 1028, 1029, 1030, 1038, and 1039 on Fort Wainwright, Alaska. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800) does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, should circumstances change and you determine that our participation is required, please notify us.

Pursuant to 36 CFR 800.6(b)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the Alaska State Historic Preservation Officer (SHPO), and related documentation at the conclusion of the consultation process. The filing of this MOA with the Council is required in order for the Army to complete its compliance responsibilities under Section 106 of the National Historic Preservation Act.

If you have any questions or require the further assistance of the Council, please contact me (303) 969-5110 or lkeatinge@achp.gov.

Sincerely,

Lee Keatinge

Lee Keatinge
Program Analyst
Western Office of Planning and Review

United States Department of the Interior
Fish and Wildlife Service
Fairbanks Fish and Wildlife Office
101 12th Ave Box 19, Room 110
Fairbanks, Alaska 99701
September 2 , 2002

Ms. Andrea Hunter
Director, Public Works
ATTN: IMWR-PW-EV
1060 Gaffney Road, #4505
Fort Wainwright AK 99703-4505

Re: Construction of Barracks
Facilities, Ft. Wainwright, AK

Dear Ms. Hunter:

This responds to your request for a list of endangered and threatened species and critical habitat pursuant to section 7 of the Endangered Species Act of 1973, as amended (Act). This information is being provided for the proposed construction of barracks facilities, Fort Wainwright, AK.

No listed species occur in these project areas and there is no designated or proposed critical habitat in the vicinity of the proposed projects. Therefore, the Service concludes that this project is not likely to adversely impact listed species. Preparation of a Biological Assessment or further consultation under section 7 of the Act regarding this project is not necessary.

This letter applies only to endangered and threatened species under our jurisdiction. It does not preclude the need to comply with other environmental legislation or regulations such as the Clean Water Act.

Thank you for your cooperation in protecting our joint responsibilities under the Act. If you need further assistance, please contact Jonathan Pindyck at (907) 356-8456.

Sincerely,

Ted Swem
Branch Chief
Endangered Species

XII. APPENDIX B
RECORD OF NON-APPLICABILITY

GENERAL CONFORMITY – RECORD OF NON-APPLICABILITY

Project/Action Name: Demolition/Reconstruction of the Barracks, Fort Wainwright, Alaska

Project/Action Identification Number: 46789 58048

Project/Action Point of Contact: Kate Siftar, Chief, Environmental Compliance Division, Fort Wainwright, Alaska, telephone: 907.353.6249

Begin Construction Date: March 2003
Midpoint Construction Date: June 2004
End Construction Date: September 2005

General Conformity under the Clean Air Act, Section 176 has been evaluated for the project described above according to the requirements of 40 CFR 93, Subpart B. The requirements of this rule are not applicable to this project/action because:

_____ The project/action is an exempt action under 40 CFR 153(c) or (d), (SPECIFY APPLICABLE EXEMPTION CATEGORY AND REGULATORY CITATION).

OR

__X__ Total direct and indirect emissions from this project/action have been estimated (No additional carbon monoxide (CO) emissions are associated with this construction project), and are below the conformity threshold value established at 40 CFR 93.153(b) of 100 tons/year CO;

AND

The project/action is not considered regionally significant under 40 CFR 93.153(i).

Support document and emission estimates if relevant are

( ) ATTACHED
(X) APPEAR IN THE NEPA DOCUMENTATION (Project # 49938, 58048)
( ) OTHER _____ _____.

Kate D Siftar ____.
Kate D. Siftar,
Chief, Environmental Compliance Division
Fort Wainwright, Alaska

NOTICE OF PUBLIC AVAILABILITY AND PUBLIC COMMENT PERIOD

Army Regulation (AR) 200-2, Environmental Effects of Army Actions, March 2002 implement the National Environmental Policy Act of 1969. Chapter 5 of AR 200-2 authorizes the preparation of a Finding of No Significant Impact (FNSI) after an EA review indicates that an EIS is not required.

ACTION: Construct a new Assembly building, Barracks, and Mission Support Training Facility at Fort Wainwright, Alaska.

ENVIRONMENTAL DOCUMENTS: An EA and FNSI have been prepared for the proposed project. Copies of these documents are available upon request. Interested parties are invited to submit, in writing, any comments or objections they may have concerning the proposed action. Comments received will be reviewed and relevant issues will be addressed and incorporated into a revised EA. If no comments are received during the Public Comment Period, the original EA will become the final EA. The Public Comment Period begins on the first day upon publication of this notice and extends for 30 days. **For further information, please contact Gale Skaugstad, Environmental Resources Department, USARAK, Directorate of Public Works, Fort Wainwright, Alaska 99703-6500, telephone: (907) 353-3001.**

SUPPLEMENTAL INFORMATION: An EA is prepared to determine the extent of environmental impacts of a proposed action and decide whether or not these impacts are significant. If the proposed action may or will result in significant impacts, an EIS is prepared to provide additional information on the context, duration, and intensity of the impacts. If an EA shows that the proposed action will not result in significant impacts, a FNSI is prepared and the NEPA compliance is satisfied. A FNSI is a document, which briefly presents the reasons why a proposed action will not have a significant effect on the quality of the human environment.

The FNSI documents the decision that an EIS is not required for NEPA compliance. A FNSI is complete when no comment period is necessary, a comment period was held but evidenced no significant public concern, or public concern resulted in reconsideration of the FNSI, which was still appropriate upon re-examination.

Frederick J. Lehman
Colonel, U.S. Army
Garrison Commander

FINDING OF NO SIGNIFICANT IMPACT

CONSTRUCT NEW ASSEMBLY, BARRACKS AND MISSION SUPPORT TRAINING FACILITIES AT FORT WAINWRIGHT, ALASKA

August 2002

DESCRIPTION OF ACTION: Construction of Assembly Building, and Mission Support Training Facility, and replacement construction for the Barracks, Fort Wainwright, AK. These facilities would improve deployment efficiency, upgrade living conditions for enlisted soldiers, and provide simulation-based training to meet new Army standards. Projects would be sited on previously disturbed locations within the Fort Wainwright administration area south of the airfield. Design and construction would begin in 2002 and be completed by 2005.

ANTICIPATED ENVIRONMENTAL EFFECTS:

1) No significant adverse environmental impacts are anticipated for fish and wildlife, geology, soils, surface or ground water quality, federally-listed threatened or endangered plant or animal species, wetlands, cultural resources, socioeconomics, environmental justice, and protection of children. This proposed action will provide a temporary positive impact on the local economy through the addition of major construction projects.

2) The Air Quality Conformity Analysis for the barracks project is still underway. This analysis will evaluate both stationary and mobile source emissions and their impact, if any, to the carbon monoxide nonattainment area that includes parts of Fort Wainwright proper. This finding of no significant impact to air quality is contingent on the stationary and mobile source emission contributions associated with this project. If impacts are identified, then additional mitigation measures will be incorporated into this EA.

3) These projects would involve the disturbance or removal of previously disturbed soils, temporary increases in noise, reduced aesthetic quality, minor increases in energy required (increased air emissions at central plant, which might require permit changes) to operate the assembly building and Mission Support Training Facility, which would be partially offset by increased energy efficiency of the barracks compared to existing old quarters.

4) Any hazardous waste or material generated or discovered would be disposed of or mitigated according to compliance standards.

MITIGATION AND CONCLUSION: Mitigation actions, as defined in CEQ Regulation 1508.20, have been incorporated into this Environmental Assessment (EA). Assembly Building, Barracks and Mission Support Training Facilities mitigation will need to be addressed. These mitigative measures shall be reviewed and incorporated in their entirety into any Work Plan, Operations Plan, or similar document that anticipates the construction of an Assembly building, Barracks or Mission Support Training Facility at Fort Wainwright as outlined in this Environmental Assessment, with adoption of the mitigative measures included therein, has been determined to not have significant effects on the environment. Construction of the Assembly building, Barracks and Mission Support Training Facilities do not require a major federal action that would significantly affect the quality of the environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969, as amended. Accordingly, the preparation of an Environmental Impact Statement for this proposed action is not required.

DEADLINE FOR COMMENTS AND POINTS OF CONTACT FOR INFORMATION: Interested parties are invited to submit any written comments or objections they may have concerning the proposed action. Comments will be reviewed, and relevant issues will be addressed and incorporated into a revised EA. If no comments are received during the public comment period, the original EA will become the final EA. The Public Comment Period begins on the first day upon publication of this notice and extends for 30 days. **For further information, please contact Gale Skaugstad, Environmental Resource Department, USARAK, Directorate of Public Works, Fort Wainwright, Alaska 99703-6500, telephone: (907) 353-5001.**

Fredrick J. Lehman
Colonel, U.S. Army
Garrison Commander

SEP 30 2002