FINAL

ENVIRONMENTAL ASSESSMENT

FOR THE DEPLOYMENT OF

120 MINUTEMAN III MISSILES AT

MALMSTROM AFB

OCTOBER 1995

Prepared in accordance with AFI 32-7061 in compliance with the National Environmental Policy Act of 1969

Responsible Agency: Malmstrom AFB, United States Air Force, Air Force Space Command

Proposed Action: Deployment of Minuteman III missiles at Malmstrom AFB to meet USSTRATCOM requirements.

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1.0 PURPOSE OF AND NEED FOR ACTION

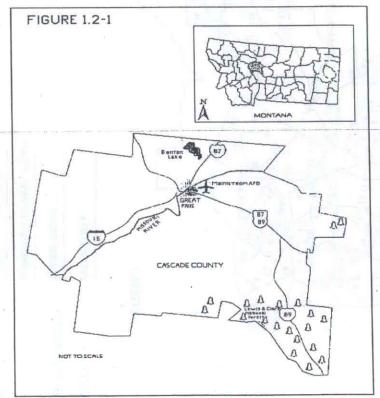
1.1 INTRODUCTION

As a result of the FY 95 Base Realignment and Closure Commission, the Air Force plans to deploy 120 Minuteman III missiles at Malmstrom AFB (MAFB) starting in October 1995. The missiles will be deployed from the deactivation of the 321st Missile Group (321 MG) which is located at Grand Forks AFB (GFAFB). This action is a continuation of the program to phase out Minuteman II missiles at Malmstrom AFB with a subsequent conversion to Minuteman III missiles.

An Environmental Assessment, Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, was completed in September 1991 which addressed the environmental impacts of the conversion. This document assess the additional environmental impact associated with the deployment of missiles from GFAFB.

1.2 LOCATION OF MALMSTROM AFB AND MISSILE DEPLOYMENT AREA

Malmstrom AFB encompasses over 3,600 acres of land in west-central Montana in Cascade County. The base lies approximately 1.5 miles east of the city of Great Falls, which is the only large population center near the base. Interstate Highway 15 passes through Great Falls and access to the base is off US Highway 87/89. Figure 1.2-1 shows the



general location of Malmstrom AFB. The affected missile sites are scattered over seven counties in Montana. The location of Malmstrom AFB missile sites are shown in Figure 1.2-2.

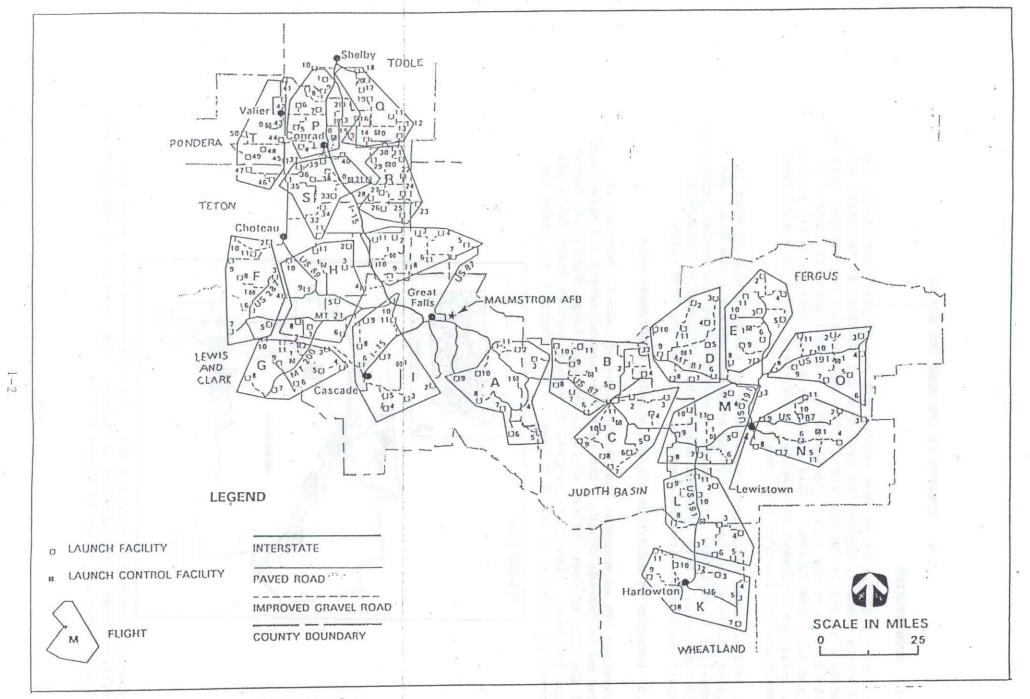


Figure 1,2-2 Malmstrom Deployment Area

1.3 APPLICABLE MONTANA REGULATORY REQUIREMENTS

1.3.1 AIR QUALITY

The Montana Clean Air Act (Montana Code, Title 75, Chapter 2) essentially implements the federal Clean Air Act. The Montana Act, implemented by the Air Quality Procedural Regulations, the Air Quality Regulations, and the Ambient Air Quality Standards, establishes ambient air quality standards and permitting and monitoring procedures.

1.3.2 WATER QUALITY

The Water Pollution Control Law (Montana Code, Title 75, Chapter 5) sets forth water conservation, water quality protection, and pollution prevention and abatement measures. Implementing regulations include the Water Pollution Control Regulations (Montana Administrative Code (MAC), Title 16, Chapter 20, Subchapter 7).

The Pollutant Discharge Elimination System Rules (MAC, Title 16, Chapter 20, Subchapter 9) establish effluent limitations, treatment standards, and other requirements for point source discharge of waste into State waters.

The Groundwater Pollution Control Regulations (MAC, Title 16, Section 20) establish groundwater classification, and set forth protection and permitting requirements, while the Surface Water Quality Standards (MAC, Title 16, Chapter 20, Subchapter 6) establish surface water quality criteria to ensure public health and safety and provide for water conservation.

1.3.3 PUBLIC HEALTH AND SAFETY/HAZARDOUS WASTE

The Solid Waste and Litter Control Act (Montana Code, Title 75, Chapter 10) provides for coordinated state solid waste management and a resource recovery plan.

The Integrated Waste Management Act (Montana Code, Title 75, Chapter 10) provides for waste reduction and recycling programs.

The Hazardous Waste Act (Montana Code, Title 75, Chapter 10), and the Hazardous Waste management Regulations (MAC, Title 16, Chapter 44) control the generation, storage, transportation, treatment, and disposal of hazardous wastes; the Act also authorizes the State to implement a program pursuant to the federal Resource Conservation and Recovery Act (RCRA).

The Refuse Disposal Regulations (MAC, Title 16, Chapter 14, Subchapter 5) implements the hazardous waste act and regulations. These regulations provide uniform standards for the storage, treatment, recycling, recovery, and disposal of solid waste, including hazardous waste, and the transportation of hazardous waste.

1.3.4 BIOLOGICAL RESOURCES

The Endangered Species Act (16 USC 1531-1543) requires Federal agencies that authorize, fund, or carry out actions to avoid jeopardizing the continued existence of endangered or threatened species or destroying or adversely modifying their critical habitat. Federal agencies must evaluate the effects of their actions on endangered or threatened species of fish, wildlife, and plants and their critical habitats and take steps to conserve and protect these species. The Act requires the avoidance or mitigation of all potentially adverse impacts to endangered and threatened species.

EO 11990, Protection of Wetlands, requires Federal agencies to take action to avoid, to the extent practicable, the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. The intent of EO 11990 is to avoid direct or indirect construction in wetlands if a feasible alternative is available. All Federal and federally supported activities and projects must comply with EO 11990.

1.3.5 CULTURAL, PALEONTOLOGICAL, AND ARCHAEOLOGICAL RESOURCES

The primary goal of the National Historic Preservation Act (NHPA) of 1966 (16 USC 470 et seq., as amended); is to ensure adequate consideration of the values of historic properties in carrying out Federal activities and to attempt to identify and mitigate impacts to significant historic properties. The NHPA is the principal authority used to protect historic properties; Federal agencies must determine the effect of their actions on cultural resources and take certain steps to ensure that these resources are located, identified, evaluated, and protected. 36 CFR 800 defines the responsibilities of the State, the Federal Government, and the Advisory Council on Historic Preservation (ACHP) in protecting historic properties identified in a project area. 36 CFR 60 establishes the National Register of Historic Places (NRHP) and defines the criteria for evaluating eligibility of cultural resources to the NRHP.

The Archaeological Resources Protection Act of 1979 (16 USC 470a-47011, as amended) protects archaeological resources on Federal lands. If archaeological resources are discovered that may be disturbed during site activities, the act requires permits for excavating and removing any archaeological resources.

1.4 DECISION NEEDED

The decision that must be made is whether or not to deploy the Minuteman III missiles to Malmstrom AFB.

2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

This action is driven by the 1995 Base Closure and Realignment Commission; therefore, the proposed action and the no action alternative are the only actions evaluated.

2.2 PROPOSED ACTION: ALTERNATIVE A: DEPLOY MINUTEMAN IIIs TO MALMSTROM AFB

2.2.1 MISSILES

Under the proposed action, the Air Force will remove MM III missiles from the LFs located at Grand Forks AFB using existing removal procedures. The current procedures are proven and have evolved over the last 30 years. Malmstrom AFB and Grand Forks AFB are only performing failure movements (replacing missile components as needed) for MM IIIs at the present time; approximately 1-3 missiles are being replaced each year. Weather conditions, equipment breakdown, and holidays would cause the missile removal and transport rate to vary.

The first day of a missile movement operation involves the removal and transport of the reentry system (RS), missile guidance system (MGS) and propulsion system rocket engine (PSRE). The booster (rocket engines) will be removed and transported to the missile support base (MSB) on the second day. This process is reversed at Malmstrom. The special vehicle used to transport the MGS and PSRE (which together comprise a post boost control system (PBCS)), will transport the components from the MSB at Grand Forks AFB to the MSB at Malmstrom AFB is the payload transporters (PT). For safety reasons, the reentry system and the PBCS are transported in separate PTs. The boosters are transported to and from the missile sites in a transporter-erector (TE). Loaded TEs returning to the MSB drive to the roll transfer building where the booster is placed in a storage container for shipment by plane, rail, or truck to Malmstrom AFB or to the depot. Transportation by truck is the preferred method. Once PTs containing the RSs are properly prepared for movement, the vehicle(s) leave the missile sites or MSB escorted by security forces to counter potential threats the vehicle might encounter while enroute. The RS and PSRE will be shipped to Malmstrom AFB, stored in the appropriate area, and transported to the missile site for emplacement in an LF.

Serviceable MGSs will be used at Grand Forks AFB for failures, other MGSs will be transported to Newark Air Station, Ohio for maintenance. Approximately 11 MGSs are replaced monthly on Minuteman IIIs. Malmstrom AFB will receive MGSs from Newark Air Station.

Newark's MGS shipment route and procedures will remain the same as it is today and has been for over 20 years. The northern base's (Minot AFB, ND, Grand Forks AFB, ND, and Malmstrom AFB, MT) will identify their needs to Newark. Newark will then load the required new MGSs on their delivery vehicles. The delivery vehicle will make a "round robin" from Newark to Minot AFB, then to Grand Forks AFB, and then to Malmstrom AFB,

delivering new MGSs and picking up unserviceable MGSs as required. After the Malmstrom stop the delivery vehicle will return to Newark and start the delivery cycle over again the next week.

2.2.2 MISSILE SUPPORT BASE (MSB) FACILITIES

Section 2.2.2 of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) provides a accurate description of MSB facilities. This information is incorporated by reference (per 40 CFR 1502.21) into this EA.

2.2.3 LAUNCH FACILITIES

The silos at Malmstrom AFB are in Minuteman II configuration; a conversion to Minuteman III configuration can occur at more than one LF at a time. The physical conversion to Minuteman III would take less than a day. The proposed action is scheduled to be completed within 3 years starting in October 1995. An average of one LF would be converted to Minuteman III every week.

A launch facility consists of a launcher and an associated launch facility support building (LFSB) within an average site area of 1.6 acres enclosed by a security fence (figure 2.2.3-1).

Activities at each LF involving missile removal and emplacement would occur within the fenced area. A slight adjustment to lengthen the slack on the umbilical cable inside the launch tube would be performed and the suspension system for the missile would be checked and adjusted, if necessary, to handle the slightly heavier MM III missile.

A software change is required to support the MM III system. This would involve replacing a tape drum on site. No other portion of the LF would be modified as part of the proposed action.

2.2.4 MISSILE ALERT FACILITIES

Under the proposed action, the only activity proposed to occur at Malmstrom's MAFs would be to modify the software within the launch control center (LCC). The software upgrade is needed to support the software upgrade at the LF. With multiple independently targetable reentry vehicles (MIRVs) and an improved range of targeting options, the computer programs for managing and operating the missiles are more complex. The LCCs would have their software converted for MM III systems.

2.2.5 FACILITIES OUTSIDE OF THE MSB AND DEPLOYMENT AREA

The main facilities involved in the conversion process other than Malmstrom AFB include Grand Forks AFB in North Dakota, Hill AFB in Utah, and Newark Air Station in Ohio.

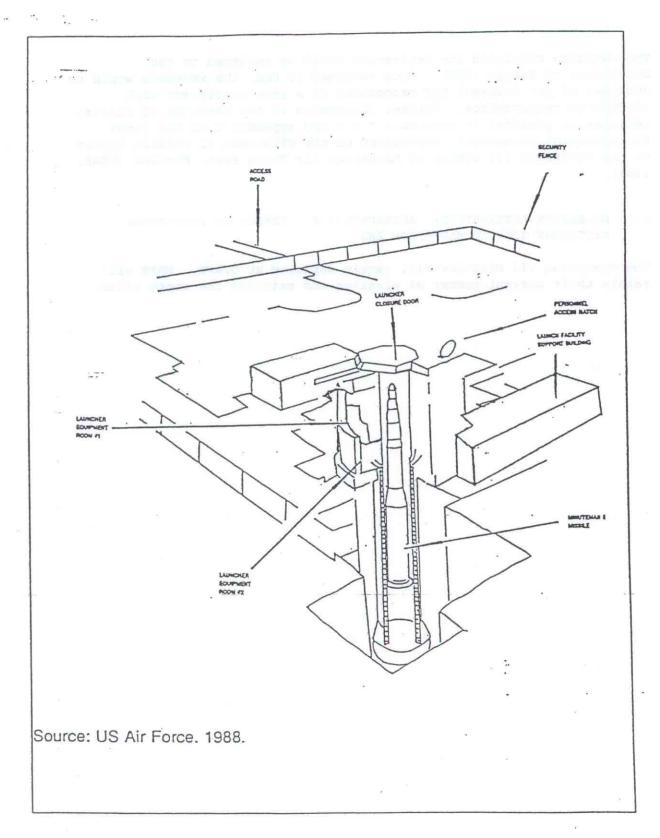


Figure 2.2.3-1 Launch Facility and Grounds

The warheads scheduled for retirement would be returned to the Department of Energy (DOE). Once returned to DOE, the warheads would be disposed of per internal DOE procedures at a rate consistent with USSTRATCOM requirements. Further discussion of the handling of reentry vehicles is provided in section 4.7.2.1 and appendix C of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991).

2.3 NO-ACTION ALTERNATIVE: ALTERNATIVE B: DEPLOY NO ADDITIONAL MINUTEMAN IIIs TO MALMSTROM AFB

The Minuteman III missiles will remain deployed at GFAFB. MAFB will retain their current number of missiles and maintain the empty silos.

3.0 AFFECTED ENVIRONMENT

The affected environment is the baseline against which potential impacts caused by the proposed action and alternative at Malmstrom AFB are assessed.

3.1 DESCRIPTION OF MALMSTROM AFB AND THE DEPLOYMENT AREA

3.1.1 HISTORY OF MALMSTROM AFB

Malmstrom AFB began as an outgrowth of using Great Falls Airport to transport war materials to the Allies as part of the Lend-Lease Act during World War II. When the flow of materials overwhelmed the airport, East Base was constructed, opening on December 15, 1942. After World War II, the base was used by the Military Air Transport Service to train C-54 transport crews. The Strategic Air Command assumed control of the base on February 1, 1954 when it activated the 407th Strategic Fighter Wing (SFW). On October 1, 1955, the base was renamed Malmstrom AFB in honor of Colonel Einar Axel Malmstrom. When the 407 SFW was deactivated on July 1, 1954, the 4061st Air Refueling Wing (AREFW) became the host unit. The 4061 AREFW was deactivated on July 15, 1961, when the 341st Strategic Missile Wing (SMW) was activated. The 10th Strategic Missile Squadron (SMS) was activated on December 1, 1961 with the deployment of 50 Minuteman (MM) IA (first model of MM) missiles. By May 1, 1962, the 12 SMS and the 490 SMS were activated, bringing the total number of MM I missiles deployed to 150. These are currently the 10, 12, and 490 Missile Squadrons (MSS). A Force Modernization Program began in November 1962 and was completed in May 1969; Minuteman I ICBMs were replaced with Minuteman II ICBMs. Launch facilities (LFs) and missile alert facilities (MAFs) were completely retrofitted to deploy the new ICBMs. On April 1, 1966 the 564 SMS (currently the 564 MS) was activated at Malmstrom AFB and became operational in April 1967 with the deployment of 50 Minuteman II ICBMs. By July 1975, the Minuteman II ICBMs of the 564 SMS were replaced with Minuteman III ICBMs. The improved launch control system was implemented for the 150 MM II LFs and 15 MAFs in 1979. The 301st Air Refueling Wing (AREFW) was last activated on 5 January 1988, operating KC-135R Stratotankers. On July 7, 1989, the 40th Air Division was activated at Malmstrom AFB as part of SAC's 15th Air Force and was deactivated in June 1991. The 301st Air Refueling Wing became the 43rd Air Refueling Wing and the host wing in June 1992. In July 1994 USAF Space Command took over as the Major Command replacing AMC and the 341 Missile Wing became the host Wing. At this time, the 43rd Air Refueling Wing was redesignated the 43 Air Refueling Group.

3.1.2 CURRENT MISSION AT MALMSTROM AFB

The 341st Missile Wing became the host unit in July 1994, responsible for maintaining Minuteman II and Minuteman III intercontinental ballistic missiles. The 43rd Air Refueling Group is responsible for the operation of KC-135R Stratotankers, which refuel fighter, bomber, and transport aircraft worldwide. Associate units based and supported by Malmstrom AFB include the Air Force Office of Special Investigations;

USAF Judiciary Area Defense Counsel; and Defense Reutilization and Marketing Office - Great Falls (DRMO/WHCG).

3.1.3 INSTALLATION ENVIRONMENTAL MANAGEMENT

The host base Environmental Flight (341 CES/CEV) is responsible for environmental management action plans at Malmstrom AFB. The Environmental Flight supports all base activities regarding environmental permits, hazardous material and waste storage, and spill prevention and response, and participates on the Base Environmental Protection Committee. The Environmental Flight's primary function is the assurance of compliance with Federal, State of Montana, local, DoD, and U.S. Air Force regulations.

The following sections describe the baseline for the environmental management areas of hazardous wastes, solid wastes, waste water, air emissions, installation restoration program, and other programs such as natural and cultural resources.

3.2 AIR RESOURCES

Air resources describe the existing concentrations of various pollutants and the climatic and meteorological conditions that influence the quality of the air. Precipitation, wind direction and speed, and atmospheric stability conditions are factors that determine the extent of pollutant dispersion.

3.2.1 CLIMATOLOGY AND METEOROLOGY

Malmstrom AFB, located in north-central Montana, is on the dry eastern side of the Rocky Mountains and has a modified semiarid continental type climate. Precipitation varies considerably during the year; the average annual precipitation is 14.4 inches. The months of October through March average less than one inch of precipitation cumulatively, with the precipitation resulting from fast-moving Pacific weather systems.

The prevailing winds are from the southwest from September through April and from the west-southwest and west from May through August. The average wind speed is 13 miles per hour (mph) with wind gusts up to 78 mph. During the winter months, the area is subject to Chinook winds that are warm and dry.

The warm Chinook winds can create a temperature inversion by overriding a cool layer of air and create an air pollution problem by trapping pollutants near the surface.

The temperatures for Malmstrom AFB range from extremes of 106 degrees Fahrenheit to -44 degrees Fahrenheit. Malmstrom AFB averages 151 days per year with temperatures less than or equal to 32 degrees Fahrenheit. The average relative humidity is 62 percent in the early morning and 44 percent in the early afternoon.

3.2.2 AIR QUALITY

The National Ambient Air Quality Standards (NAAQS), established by the EPA, specify safe concentration levels for six criteria pollutants. Table 3.2-1 lists the federal air quality standards for the criteria pollutants and the Montana Ambient Air Quality Standards (MTAAQS). With an exception of the $\rm SO_2$ standard, exceedance of MTAAQS 1-hour standards are not allowed more than once per year. Montana also has standards for hydrogen sulfide, settled particulate matter, and visibility that applies to prevention of significant deterioration (PSD) mandatory Class I areas.

		Ambient Air Quality Standards		
Pollutant	Unit	Averaging Time	NAAQS	MTAAQS
O ₃	μg/m³	1-hour	235	196
CO	μg/m²	1-hour	40,000	26,000
SO ₂	μg/m³	1-hour 24-hour AAM	none 365 80	1,310 ^a 262 ^b 52 ^b
NO ₂	μg/m³	1-hour AAM	none 100	564 94

The State made an air quality determination by comparing ambient air levels with the appropriate primary or secondary standards for each criteria pollutant. Areas not meeting NAAQS or MTAAQS are designated as nonattainment for the specific pollutant causing the violation. For the purpose of this assessment, any area in exceedance of the standards is at risk of experiencing potentially significant impacts for specified pollutants, regardless of attainment classification.

The air quality of the deployment area and Malmstrom AFB is good to excellent (Montana Department of Health and Environmental Sciences, 1991). Seven counties, Cascade, Chouteau, Fergus, Judith Basin, Lewis and Clark, Teton, and Wheatland County, contain the affected missile deployment area. The deployment area and transportation network are in attainment status for all criteria pollutants.

Malmstrom AFB is located in Montana Air Quality Control Region (AQCR) 141, which covers north-central Montana. Great Falls is the population and industrial center for AQCR 141; therefore, the State concentrated their air quality monitoring in this area. The State designated Great Falls as an attainment area.

Specific regulations for PSD (40 CFR 52.21) define air quality levels that cannot be exceeded by major stationary emission sources in specified geographical areas. Major stationary sources are usually sources that emit more than 100 tons per year of a specific pollutant. The regulations establish limits on the increments of SO₂ and total suspended particulates (TSP) that may be emitted in each of three class areas. Class I areas are pristine areas and include National Parks and

Wilderness areas. The Clean Air Act classifies all other areas in the United States as Class II that allows moderate, well-controlled industrial growth. Four PSD Class I areas border the deployment area: Bob Marshall Wilderness Area, Gates of the Mountains Wilderness Area, Scapegoat Wilderness Area, and UL Bend Wilderness Area. Figure 3.2.2-1 shows the location of sensitive areas near the deployment area. Three LFs are within Lewis and Clark National Forest (two in Cascade County and one in Judith Basin County), several LFs are within a few miles of National Forests, and several LFs are within a few miles of National Wildlife Refuges (NWR), including Pishkun NWR, Benton Lake NWR, Charles M. Russell, Willow Creek, and War Horse NWR. Freezeout Lake (a State Wildlife Refuge) is within the western portion of the deployment area and Giant Springs State Park is northeast of Great Falls, approximately 10 miles from the closest LF.

3.3 WATER RESOURCES

3.3.1 GROUND WATER

Section 3.4.1, 3.4.2, and 3.4.3, of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) includes a description of existing ground water, surface water in the deployment area. The findings of this analysis are incorporated by reference (per 40 CFR 1502.21) into this EA.

3.4 GEOLOGICAL RESOURCES

3.4.1 PHYSIOGRAPHY AND TOPOGRAPHY

The MSB and the missile deployment areas are part of the Missouri Plateau, located in the physiographic region known as the Great Plains. The deployment area is comprised of rolling terrain with buttes and tablelands, with isolated mountain ranges rising 2,000 to 4,000 feet above the plains in southern and western portions of the deployment area.

3.4.2 GEOLOGY

Sections 3.3.2, of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) includes a description of existing geology at Malmstrom AFB, and the launch facilities. The findings of this analysis are incorporated by reference (per 40 CFR 1502.21) into this EA.

3.4.3 SOILS

The deployment area contain complex soil associations, including more than 50 soil series classified into three subgroups: Argiborolls, Torriorthents, and a variety of mountain and highland soils. Most soils in the deployment area are clay and silt dominated, are moderately

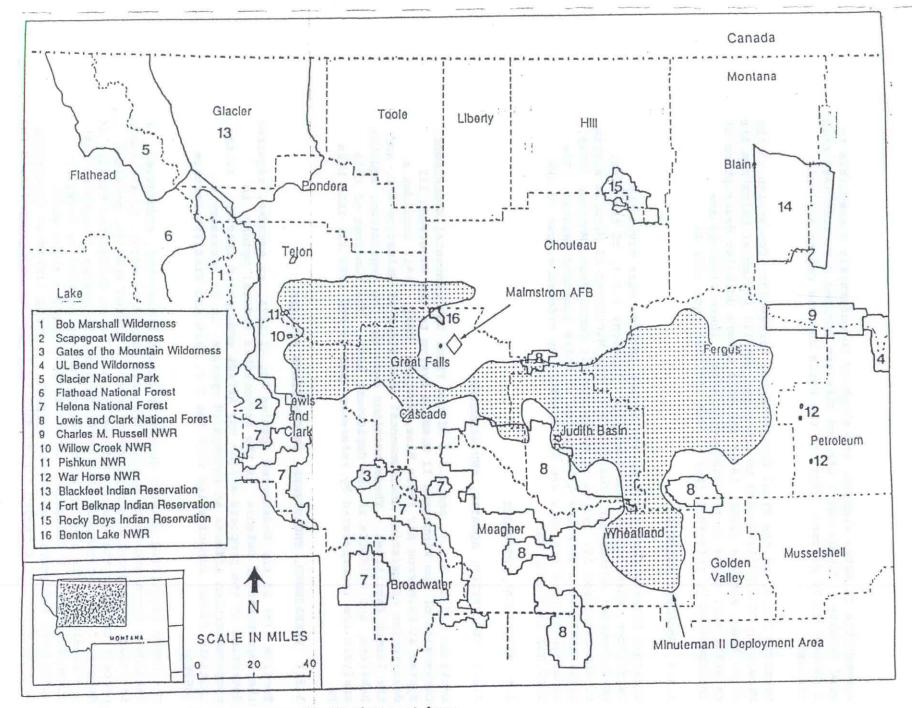


Figure 3.2.2-1 Sensitive Areas near the Deployment Area

susceptible to water erosion, and slightly to moderately susceptible to wind erosion. Slopes where LFs and MAFs are located vary from less than 2 percent to 30 percent. Most of the soils in this region are well drained.

Sections 3.3.3, of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) includes a more detailed description of existing soil types in the deployment area. These findings are incorporated by reference (per 40 CFR 1502.21) into this EA.

3.4.4 GEOLOGIC HAZARDS

Geologic hazards that exist in the region include mass movements, landslides, earthquakes, and faulting. Sections 3.3.4, of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) includes a detailed description of these geologic hazards. The findings of that analysis are incorporated by reference (per 40 CFR 1502.21) into this EA.

3.5 BIOLOGICAL RESOURCES

3.5.1 VEGETATION, AQUATIC, AND WILDLIFE

Sections 3.5.1, 3.5.2, and 3.5.3 of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) includes a description of existing environmental conditions at Malmstrom AFB, and the launch facilities. These sections describe the vegetation, aquatic habitats, and wildlife in the deployment area. The findings of this analysis are incorporated by reference (per 40 CFR 1502.21) into this EA.

3.5.2 THREATENED, ENDANGERED, OR CANDIDATE SPECIES

Section 7(c) of the Endangered Species Act of 1973, as amended, requires the Department of Defense, as the responsible Federal agency, to determine if the proposed action may affect endangered species. If the proposed action affects an endangered species, it is necessary to initiate formal consultation with the U.S. Fish and Wildlife Service (USFWS).

The USFWS identified several federally listed threatened, endangered, or candidate flora and fauna species that are likely to occur, or are known to occur, throughout the deployment area. A listed species, provided protection under the Endangered Species Act, is so designated because of danger of its extinction. The USFWS denotes the status of species that are candidates for listing as threatened and endangered by Category classification. A Category 1 candidate is a species about which sufficient information exists to support its being listed as threatened or endangered. A Category 2 candidate is a species being considered for

listing, but information about it is insufficient to merit listing. Category 3 includes species that were once considered for listing but are no longer being considered. Nearly all species listed as threatened or endangered at the State level are also listed at least as candidates at the Federal level.

During June and July 1994, Malmstrom AFB and the deployment area was surveyed for threatened and endangered species. There was one Category 2 plant species identified near Site A-5. The population is approximately 60 feet away from the security fence. Two Category 2 wildlife species were identified near missile sites. They are the ferruginous hawk and the loggerhead shrike. If a Category 2 species becomes listed as threatened or endangered, formal consultation with the USFWS is required by any federal agency proposing a project which could affect that species. Additionally, sharp-tailed grouse were observed at Site I-4. The Columbian sharp-tailed grouse (Tympanuchus phasianellus columbianus) is considered a Category 2 candidate species by the USFWS. It is unlikely that the Columbian sharp-tailed grouse subspecies was observed because they are only known from the Tobacco Plains in the extreme northwest part of Montana. It is included in this assessment because the only way one can distinguish between species is with genetic analysis. During the survey potential habitat was found in the proximity of additional missile sites for the above mentioned species as well as for Baird's sparrow, the black-backed woodpecker, mountain plover, northern goshawk, Preble's shrew, and the spotted bat, all of which are classified as Category 2 candidate species.

Table 3.5.4-1 identifies the site at which Federal and State listed endangered, threatened, or candidate species or potential habitat were observed.

	d Within o	r Near th	he Deploy	ment Are	andidate Species
Species/Common Name	Listing	Missile Site	Observed	Habitat present	Management Recommendations
Baird's Sparrow	C2	A-2		Х	Avoid excessive veg. disturbance
		I-6		X	
		N-11		x	TOTAL CONTRACTOR - IV
		P-4		x	1
		T-49		X	Annual Landson Company
Black-backed Woodpecker	C2	A-6		x	Avoid excessive
		C-8		X	veg. disturbance
		C-9	DOMESTIC OF	x	
		N-4		x	
Ferruginous Hawk	C2	C-7		x	None, AF activities should not affect them
		J-1	X	X	
		K-10		X	
		L-8		X	
Long-styled thistle	C2	A-5	х	х	Avoid disturbance o topsoil (construction projects)
Loggerhead Shrike	C2	A-1		x	Avoid excessive
	100	A-2		X	veg. disturbance
		A-4		x	

Table 3.5.4-1 Continued

Federal - and State listed Threatened, Endangered, or Candidate Species Found Within or Near the Deployment Area

Species/Common Name	Listing	Missile Site	Observed	Habitat present	Management Recommendations
Loggerhead Shrike		A-8		X	
		B-8		X	
		M-11		X	+
		0-19	x	X	
Mountain Plover	C2	K-4		X	Avoid excessive veg. disturbance
		K-6		x	
		K-8		277.1	
		L-3	-	X	
	the Laboratory	L-4		X	THE DELTA
		L-5		X	
	1			X	
		L-6		X	
Northern Goshawk		L-8		X	
NOI CHEIN GOSNAWK	C2	A-5		X	Avoid excessive
		A-6		X	veg. disturbance
	om Te,li	A-8	A CONTRACTOR	X	
		C-9		X	
		K-11		X	
		M-6		X	
10 10 10 10 10 10 10 10 10 10 10 10 10 1		N-4		X	
Preble's Shrew	C2	E-3	12000	X	Conduct surveys if a
	THE THE	0-2		X	substantial amount
		0-3		X	of vegetation will
		0-4		X	be altered/removed
Sharp-Tailed Grouse	See text	1-4	х	x	Avoid excessive veg. disturbance
Spotted Bat	C2	N-11		X	Consult a biologist
4 7 7		R-30		х	if disturbing foraging areas

- Cl Sufficient evidence is available to list the species as endangered
- C2 Species is being considered for listing but not enough information exists
- C3 Species that were once considered for list but are no longer being considered

Section 3.5.4 of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) includes a description of other listed species that may occur within the deployment area as provided by the USFWS. The findings of this analysis are incorporated by reference (per 40 CFR 1502.21) into this EA.

3.6 CULTURAL RESOURCES

Cultural resources include four elements: prehistoric, historic, Native American, and paleontological resources. The description of the potentially affected cultural resources is focused on the deployment area because those at MAFB would not be affected. More than 300 sites have been recorded in the deployment area.

3.6.1 PREHISTORIC, HISTORIC, NATIVE AMERICAN, AND PALEONTOLOGICAL RESOURCES

Section 3.6.1, 3.6.2, 3.6.3 of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III

System at Malmstrom Air Force Base, Montana (USAF, 1991) provide background information for prehistoric, historic, Native American, and paleontological resources in the deployment area. The findings of this analysis are incorporated by reference (per 40 CFR 1502.21) into this EA.

Prehistoric resources are physical properties resulting from human activities predating written records. They are generally identified as either isolated artifacts or sites. Sites are often delineated through intensive archaeological surveys. The entire base and 1,350 acres adjacent to the northern and eastern base boundaries have been surveyed for cultural resources. (Historical Research Associates, 1988a; Historical Research Associates 1989a; Argonne, 1995).

Malmstrom AFB has surveyed 126 out of a total 220 missile site for cultural and archeological resources. This was accomplished with two different surveys, "Intensive Cultural Resources Survey of Selected Locations, Malmstrom AFB Deployment Area, Montana" April 1989 and "Cultural Resources Sample Survey Malmstrom AFB Deployment Area, Montana" March 1988. No sites were discovered on any of the surveyed missile sites. It is unlikely that missile sites not surveyed would have any archeological or cultural sites due to the extensive disturbance created during the missile silo construction process. Table 3.6.1-1 list the sites discovered during the two surveys. All sites recorded are either on adjacent property owners land or along county road right-of-ways.

		Tabl	e 3.6.1-1					
Archaeological Resources On Or Near Malmstrom's Deployment Area								
Site	Location	Site Type	Geological Period	Reference / Ownership	Description			
24FR668	N-06 access road	Paleontological Locality	Cretaceous or Jurassic	A **	fossilized marine invertebrates			
24WL97	K-04 access road	Paleontological Locality	Cretaceous	A *	fossilized marine gastropods in sandstone matrix			
24PN75 NRHP potential	R-22 west of site	Stone Circles	Unknown Aboriginal	Α .	21 stone circles & at least 17 rock caims			
24FR669	N-06 crosses access road	Railroad Grade	Historic	A *	Abandoned Chicago, Milwaukee, St Paul and Pacific Railroad Spur Line			
24WL96	K-04 north of site	Homestead	Historic Euro- American	Α. •	Remains include glass, stoneware, china, nails, metal fragments & brick fragments			
24CA276	Along road near Square Butte, W of Great Falls	Stone Circles	Unknown Aboriginal	В **	2 to 4 stone circles			
24CA277	Along section line road near Benton Lake	Lithic Scatter	Unknown Aboriginal	В ••	Primary & secondary flakes of yellowish-gray siltstone			
24CH667	Along a section line road near Glacial Lake Great Falls	Stone Circles	Unknown Aboriginal	В **	Stone circle consisting of 46 stones			
24FR649	Along a county road in Fergus County on a bench slope below the top of a pedmont	Lithic Scatter	Unknown Aboriginal	В **	Primary & secondary flakes with retouch, tan/gray/green chert			
24TT179	Along a county road 1/4 mile N of a coulee leading to a drainage from Pishkun Reservoir	Stone circles	Unknown Aboriginal	В **	Possible stone circle approx. 5 m in dia.			

A - Reference "Intensive Cultural Resources Survey of Selected Locations, Malmstrom AFB Deployment Area, Montana" April 1989.

B - Reference "Cultural Resources Sample Survey Malmstrom AFB Deployment Area, Montana" March 1988.

^{* -} Site is adjacent to Malmstrom's property or right-of-way

3.7 HEALTH AND SAFETY/HAZARDOUS MATERIALS

This category addresses issues that may pose a threat to the safety, health, and well-being of the public. This includes the handling, storage, and disposal of hazardous wastes; the handling and storage of nuclear materials; explosives safety; and, transportation accident potential.

The Air Force has formal safety programs addressing missile logistics that provide detailed safety requirements, training, and a mandatory reporting system for identifying and preventing safety-related problems. Missile facilities are regularly inspected to ensure compliance with rigid safety criteria.

3.7.1 TRANSPORTATION AND HANDLING SAFETY

Safety provisions are incorporated into all aspects of missile maintenance and transportation. The Air Force has a good record of safe handling and maintenance of missiles. Approximately 500,000 road miles have been driven by transporter-erectors carrying MM missiles (I, II, and III) between all deployment bases and launch facilities. In roughly 30 years, only six rollover accidents have occurred, with none involving propellant ignition. The AFLC has prepared an environmental assessment on the transportation and disposition of missile motors from Malmstrom AFB under AFLC custody. The study evaluates accident scenarios and discusses the safety record of rocket motor transport (AFLC, 1991a). No serious accidents involving transport of the guidance system, reentry system, and the PSRE have occurred.

Transportation of MGS and boosters is performed under Technical Order 35D3-11-52-2 and other Air Force Regulations by highly trained and qualified personnel. Equipment used is certified and TE routes are surveyed periodically, including bridges, to ensure structural soundness. A high level of security is required and operations take place only during good weather conditions.

Operations with nuclear weapon systems must undergo a series of reviews to ensure safe operation according to Department of Defense Directive 3150.2, Safety Studies and Reviews of Nuclear Weapon Systems, February 8, 1984. An initial safety study must be completed in the weapon design stages, another safety study is conducted before the weapon system becomes operational, and an operational safety review is conducted within two years of the weapon system becoming operational and a minimum of every five years while the weapon system is operational.

No significant radiation hazard to civilians or military personnel occurs from normal handling of nuclear warheads. The radiation exposure levels have been measured and are found to be well within established federal guidelines.

Transportation of RVs and RSs is performed under DoD Directive 4540.5, Movement of Nuclear Weapons by Noncombat Delivery Vehicles, by highly

trained and qualified personnel. All equipment used for transporting RV's and RS's is nuclear certified. Transportation routes are periodically surveyed and bridges are inspected for structural soundness. A high level of security is required and operations take place only during good weather conditions (the absence of deep snow or ice, high winds, or temperature extremes).

Section 3.7.1, and section 4.7 of appendix C of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) discuss the potential environmental impacts of a release of nuclear material.

3.7.2 HAZARDOUS MATERIALS/WASTE

Hazardous materials are used at Malmstrom AFB in missile maintenance include sodium chromate, battery acids, paints, and general base maintenance activities. Hazardous wastes are generated at Malmstrom in missile maintenance activities including waste sodium chromate, waste solvents, waste paint and strippers, and other associated materials.

Hazardous wastes are accumulated on base at Hazardous Waste Accumulation Points (HWAPS). The Central HWAP for the base is located south of Bldg. 407 (BCE complex). Currently hazardous wastes are removed from Malmstrom by contractors for the Defense Reutilization and Marketing Office (DRMO) located on site.

3.7.3 WASTE MANAGEMENT PROGRAMS

Solid and hazardous waste programs provide for the collection, handling, and disposal of waste materials, response operations to spills of hazardous materials or wastes, and management of the installation restoration program (IRP). In Montana, hazardous and solid waste issues are regulated at the state level.

At Malmstrom AFB, the solid and hazardous waste programs and the IRP are managed by the Environmental Flight. The responsibility to develop a Spill Prevention and Response Plan providing procedures for spill reporting, containment, cleanup, and disposal, resides with the Environmental Flight. The Fire Department requests support, as needed, from local volunteer departments in the event of a spill. The Environmental Flight is responsible for Superfund Amendments and Reauthorization Act (SARA) Title 3 public notification of spills.

Hazardous waste management consists of the collection, storage, and transportation of hazardous wastes as defined by RCRA. A release of certain materials, could result in the generation of hazardous wastes. Hazardous wastes are recorded and processed through the Environmental Management Office and the Defense Reutilization and Marketing Office (DRMO).

Solid waste collection and disposal services are provided to the base by civilian contractors and the City of Great Falls. Material is taken off base to a private landfill. Malmstrom currently generates 15.6 tons of solid waste per day.

Wastewater from the base is discharged to the City of Great Falls and managed under a service contract with a private sewage treatment management firm. The facility is currently processing 0.65 million gallons per day (MGD) which is 3 percent of its 21 MGD capacity. Wastewater at MAFs is collected in a 1 to 3 million gallon lagoon. These lagoons are total retention lagoons and do not require a NPDES permit.

Installation Restoration Program (IRP): There are 15 open sites located on Malmstrom AFB. None of these sites would be affected by the proposed action. No open IRP sites exist in the missile deployment area.

3.8 NOISE

Section 3.8 of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) includes an analysis of typical noise levels on Malmstrom AFB and in the deployment area. The findings of this analysis are incorporated by reference (per 40 CFR 1502.21) into this EA. The typical level of noise in the deployment area due to routine maintenance at LFs and the two to four missile movements that occur per month is less than 50 $L_{\rm dn}$. Outdoor daytime residual noise levels at remote wilderness sites are about 16 $L_{\rm dn}$, while agricultural areas range from 35 to 45 $L_{\rm dn}$ (USAF, 1991)

3.9 TRANSPORTATION

The primary method for transportation is by road. If road systems are closed for a significant period of time (1 week), aircraft may be used. If the flightline at Malmstrom closes or it is infeasible to use aircraft then the rail system may be used.

The designated routes to move the boosters from Grand Forks to Malmstrom are by Interstate highway. The trucks will proceed south on Interstate 29 to Interstate 94 at Fargo, North Dakota. Then west on Interstate 94 to Interstate 15 at Butte, Montana. Then north on Interstate 15 to Great Falls. The trucks will return to Grand Forks via Highway 2.

The primary road network in the Great Falls area includes four east-west roads (U.S. 2 and 12, Montana State Highways 81 and 200) and eight north-south roads (1-15, U.S. 87/89,191, and 287, Montana State Highways 3,19, and 80) (USAF, 1986). Malmstrom AFB is reached by U.S. 87/89 and State Highway 200. The principal city streets in Great Falls follow a grid-type network of north-south and east-west roads. The most heavily used road in the city is four-lane 10th Avenue South, also considered as part of U.S. 87/89, which is one of the primary access roads to Malmstrom AFB. This highway is located immediately south of the base.

Although 10th Avenue South is the most congested street in Great Falls, most TE movements occur during non-rush hour times (before 6:00 a.m. and after 6:00 p.m.).

Transporter-erectors (TEs), support vans, and other vehicles are driven on some of the principal city streets (e.g., 10th Avenue S.) through Great Falls and the primary highways leading to Malmstrom AFB. While there are specially designated TE routes, mainly because of restrictions regarding the size and weight of the vehicle, other vehicles (e.g., support vans, maintenance vehicles, reentry vehicle/guidance and control (RV/G&C) vans, and payload transporters (PTs)) may also follow these routes.

Level of Service (LOS), ranging from A (best) through F (worst), is a qualitative measure incorporating various factors (i.e., speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs) provided by a road facility under a particular volume condition. The LOS along the TE graveled routes is designated as LOS A and most primary roads through Great Falls are designated as LOS A or B (USAF, 1987). Traffic flows are low, with moderate flows occurring along primary and urban routes.

The 1985 average daily traffic (ADT) flow entering or leaving Malmstrom AFB by the main gate at 2nd Avenue North was 10,538 vehicles. The section of 10th Avenue North leading to the commercial gate had a 1985 ADT of 3,584. There are no significant congestion areas except during the peak periods (7:30 - 9:00 A.M. and 3:30 - 5:00 P.M.) when occasional, short delays occur at the gate for those entering the base. Another gate exists along U.S. 87/89 at the south end of the base; this is primarily used by military traffic commuting to the Weapons Storage Area and the eastern part of the base.

There are approximately 3,500 total miles of roads in the deployment area, approximately 787 miles of which are gravel roads, and there are a total of 1,707 miles of TE routes, consisting mostly of asphalt (56 percent) and gravel (43 percent) surface (USAF, 1981). The main transportation routes to and from Malmstrom AFB are paved roads and proceed to secondary and gravel roads to the LFs and MAFs. For the 12 MS and 564 MS, TEs travel west on U.S. 87/89 toward 10th Avenue South. To reach the 10 MS and 490 MS, TEs travel east on U.S. 87/89.

A 4-inch layer of gravel which exceeds State or local minimum requirements-must be maintained on the gravel roads used by the TEs for safe and dependable movements in all weather conditions. The Air Force has financed in whole or in part the re-gravelling of county roads used for missile transport. Roads are periodically graded to improve the surface, but this is not done annually. Throughout the deployment area, the Air Force has improved the road network by creating roads and paying for improvements to the roads that existed before MM II deployment.

The accident rate per miles driven for Air Force vehicles is very low (section 3.7.1). Two accidents have occurred with rocket motors going to or from Malmstrom AFB since the MW was activated in 1961 (HQ SAC/LGBX,

1991). No accidents involving PT or RV/G&C vans have occurred-because of the convoy movement of these vehicles and the delicacy of the movement issue, chances of an accident are minimized.

Section 3.9 of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) includes additional information on transportation. The findings of this analysis are incorporated by reference (per 40 CFR 1502.21) into this EA.

3.10 SOCIOECONOMICS

The deployment area covers seven counties in Montana; however, for socioeconomic concerns Cascade County, Montana is considered the region of influence (ROI) for this action. In 1990, Cascade County had a total population of 77,691 people, making up a total of 30,206 households. The majority of the population, over 70 percent, live in Great Falls. Total population in the ROI is estimated to reach 78,338 by 1995. Total employment in the ROI was 45,320 and the earnings totaled approximately \$0.88 billion in 1991. Employment and earnings in the ROI are estimated to reach approximately 47,560 jobs and \$0.97 billion in 1995. Unemployment rates for Cascade County have closely followed the statewide unemployment rates. In 1992, the unemployment rate for Cascade County was 6.1 percent, slightly lower than the 6.7 percent state-wide rate. Malmstrom AFB plays a significant role in the regional economy. Malmstrom AFB currently employs 4,174 military and 452 civilian employees, directly accounting for more than 10 percent of employment in THE RESERVE OF THE PARTY OF THE the ROI.

Section 3.10 of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) includes additional analysis the existing socioeconomics of the area. The findings of this analysis are incorporated by reference (per 40 CFR 1502.21) into this EA.

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4.0 ENVIRONMENTAL CONSEQUENCES

For this environmental assessment (EA), possible environmental effects arising from implementation of the proposed action or no action alternative were assessed. The likely major elements of the proposed action and no action alternative were identified and the major activities associated with these elements were evaluated. For each major activity, the types of effects were defined in various environmental resource areas. This enabled the identification of effects generated by an activity (direct effects) and effects the activity has on another resource (indirect effects).

The analysis of potential environmental impacts of those resources not affected by the alternative actions or which have not changed since the release of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) are not described in the same level of detail as those that would likely be affected.

The significance - the importance - of an environmental impact depends on several factors including the following:

- The magnitude the size of the change in the baseline condition.
- The likelihood the chance of the change occurring if the action is taken.
- The context the setting or frame of reference. This has both spatial (geographic) and temporal (timeframe) meanings: the significance of an impact can vary in local vs regional vs national vs global contexts. Similarly, impact significance can be different in the short term vs the long term.
 - The intensity the severity of an impact (as the term is used by CEQ at 40 CFR 1508.27). Included in this factor are considerations of the following:
 - The severity of adverse effect components within overall impacts that have both beneficial and adverse components.
 - The degree of adverse effect on specific resources or concerns (such as public health, endangered species, historic places).
 - The potential for violation of laws or regulations.
 - The potential of this action as precedent.
- The degree of uncertainty and unknowns.
 - The degree of potential controversiality.
 - The uniqueness of the setting.
 - The relation to other actions with potential cumulative (additive) effects;
 - The permanence, the reversibility of the impact, and the resilience of the affected resource.

These factors were considered for each resource area and used as a guideline to categorizing the significance of impacts. The estimated environmental impacts of the proposed action and the no action alternative were evaluated, then compared to the significance criteria to determine the potential significance of the predicted impacts. For this analysis, short-term impacts are those that would occur during the conversion process and long-term impacts would occur after completion of the conversion process. The results of this analysis are presented in the following sections.

4.1 MALMSTROM AFB

4.1.1 MISSION AND OPERATIONS

There would be no significant change in Malmstrom AFB's mission and operations if the proposed action was adopted or the current operations continued (no action). The only difference in the mission would be an entire deployment area with MM III missiles rather than the 80 MM IIIs and 120 unarmed sites. As previously discussed in chapter 2, there is a negligible difference in the maintenance and operation of the different MM missiles. With the emplacement of the MM IIIs Malmstrom will return to a full compliment of missiles returning it to its 1991 status.

4.1.2 INSTALLATION ENVIRONMENTAL MANAGEMENT

There would be no significant change in the installation's environmental management of the operations and missions occurring at Malmstrom AFB if the proposed action was adopted or the current operations continued (no action). The same types of wastes would be handled, the same air emissions would occur, and the environmental considerations would be the same. Currently, all the missile silos, including empty ones, are being maintained so waste generation will not increase significantly from the conversion process.

4.2 AIR QUALITY

Section 4.2 of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) includes an analysis of air quality impacts. The significance of impacts to air quality is based on Federal, State, or local pollution regulations or standards. A significant impact would be a violation of the National Ambient Air Quality Standards (NAAQS) or Montana Ambient Air Quality Standards (MTAAQS), further exceedance of a nonattainment criterion, a more than 5-percent increase in criteria pollutant concentrations, or exposure of sensitive receptors to increased pollutant concentrations. No significant impacts to air quality were expected from the conversion. The findings of this analysis are incorporated by reference (per 40 CFR 1502.21) into this EA.

4.3 WATER RESOURCES

The introduction of chemicals and physical disturbances may degrade water quality and quantity. A significant impact would occur if an

aquifer or surface water body would be damaged in terms of water quality. A negligible impact is when there are no measurable changes in water quality or quantity. The processes which may impact water resources are the same for the proposed and no action alternative. Both of which are expected to have negligible impacts on water resources. Section 4.4 of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) includes an analysis of quality impacts. No significant impacts to water resources were expected from the conversion. The findings of this analysis are incorporated by reference (per 40 CFR 1502.21) into this EA.

4.4 GEOLOGICAL RESOURCES

Geological resources are limited nonrenewable resources vulnerable to deterioration by physical disruptions. Significant impacts on geological resources occur when a local or regional resource is depleted, a fault is activated, a slumping or movement event causes injuries or irreparable damage, accelerates the rate of erosion, degrades soil characteristics, and reduces productivity by a loss of vegetation. When a resource is not important to a region or is only slightly affected, a negligible impact is said to have occurred. Section 4.3 of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) includes an analysis potential geologic impacts. The findings of this analysis are incorporated by reference (per 40 CFR 1502.21) into this EA. The only impacts expected from the conversion would be dust generation from the transports using the gravel roads. The expected impact is insignificant and short term in nature.

4.5 BIOLOGICAL RESOURCES

Native or naturalized plants and animals, and the habitats in which they occur, are collectively referred to as biological resources. Particularly important are plant and animal species that are protected under the Endangered Species Act.

Impacts on biological resources would be significant if species are lost, with little likelihood of their successful existence or reestablishment after implementing the proposed action. An insignificant, yet adverse, impact would result if the disturbed population could be reestablished to its original state and condition, or the population is sufficiently large or resilient to respond to the proposed action without measurable change. An increase in population numbers and species viability, or enhanced habitat would be viewed as a beneficial impact.

4.5.1 ANALYSIS METHODS

The analysis methods used to determine potential impacts of activities associated with the proposed action and other alternatives consisted of a review of existing data and previously written environmental documents for the deployment area.

4.5.2 POTENTIAL IMPACTS OF THE PROPOSED ACTION

4.5.2.1 VEGETATION

Most of the LFs are in upland areas of predominantly grassland vegetation and cropland. However, all conversion activities at the LFs would occur within the security fence, which is a graveled, unvegetated area. The conversion activities will not have an adverse effect on the surrounding vegetation.

4.5.2.2 AQUATIC

No significant ground disturbance would occur during the conversion process that would increase soil erosion from wind and water runoff. Thus, no significant adverse impacts on aquatic resources, including wetlands, from runoff would occur in the project area.

4.5.2.3 WILDLIFE

The level of activity in the immediate vicinity of the LFs would not significantly differ from what currently occurs. The short-term increase in Air Force vehicular traffic on deployment area roads could temporarily disturb resident wildlife. However, because the routes to each LF are different, the impact of any additional vehicles or increased activity would be short-term and no significant impacts such as habitat abandonment or decreased reproduction in feral or domestic herds are expected.

4.5.2.4 THREATENED, ENDANGERED, AND CANDIDATE SPECIES

No Federal- or State-listed threatened or endangered species have been found on base or on any LF sites. The Category 2 species and habitat observed in the deployment area will not be adversely affected by the proposed action. Because the conversion program, other than transportation of missile components to and from the site, would be confined to the area within the security fence, no new areas would be disturbed (no habitat used by the candidate species would be lost). No impacts to any threatened, Endangered, or candidate species are expected.

4.5.3 POTENTIAL IMPACTS OF THE NO ACTION ALTERNATIVE

Continued operation would primarily involve routine missile maintenance and replacement activities. Runoff from the LF area would continue during periods of precipitation resulting in a negligible change from current levels. Stream sedimentation and some leaching of herbicides used to control vegetation within the security fence area would continue to occur.

These events have not resulted in any significant adverse effects on the aquatic environment. The no action alternative would have insignificant adverse impacts on biological resources. Under this alternative, any impacts to the resource would remain unchanged.

4.5.4 MITIGATION MEASURES

No significant adverse impacts to biologic resources would be expected from the proposed action. However, the management recommendation mentioned in section 3.5.2 will be followed were applicable to avoid disturbance of candidate species.

4.5.5 UNAVOIDABLE IMPACTS

The proposed action would not result in any significant unavoidable adverse impacts to biological resources.

4.6 CULTURAL RESOURCES

Cultural resources are resources whose values may be easily diminished by physical disturbances. This resource element constitutes those items, places, or events considered important to a culture or community for reasons of history, tradition, religion, or science. The criteria used to determine the significance of impacts on cultural resources include the effects on National Register of Historic Places (NRHP) eligibility, future research potential, or suitability for religious or traditional uses. Impacts would be significant if they result in the physical alteration, destruction, or loss of a resource listed, or eligible for listing, in the NRHP, or considered important to Native American groups. Adverse impacts would be insignificant if slight portions of the resource are affected or the value of the resource is not that important.

4.6.1 ANALYSIS METHODS

The analysis consisted of a review of existing data, publications, and previously written environmental documents to determine the extent and value of prehistoric and historic, Native American, and paleontological resources that may be affected.

4.6.2 POTENTIAL IMPACTS OF THE PROPOSED ACTION

The conversion activities proposed at the LFs and MAFs would occur within the security fences. As stated in section 3.6.1 no sites have been identified within the security fences. Additional, if any cultural resources were discovered on a site they would most likely not be considered eligible because of the extensive physical disturbance at these sites during their construction.

Sections 4.6.2.1, 4.6.2.2, and 4.6.2.3 of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) includes a complete analysis of potential effects to prehistoric, historic, Native American, and paleontological resources for the proposed action and the no action alternative. The findings of this analysis (no significant impact) are incorporated by reference (per 40 CFR 1502.21) into this EA.

4.7 HEALTH AND SAFETY/HAZARDOUS MATERIALS

Human health and safety may be affected by activities associated with the proposed action and the no action alternative. Base personnel performing the actions would follow protective guidelines and regulations when handling explosives and hazardous materials, and transporting missile components.

If the workers or the general public were to be exposed to hazardous materials, such as PCBs, sodium chromate solution, or a transportation accident, human health and safety could be significantly affected. Adverse, significant impacts could also occur if workers violate required procedures. Development of improved handling procedures for the removal of PCBs, sodium chromate solution, and nuclear material would have beneficial impacts in the deployment area. Beneficial impacts could occur if the amount of hazardous wastes generated and/or disposed of is decreased or if previous wastes are removed or cleaned up.

Sections 4.7.1 through 4.7.5 of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) address all hazardous material issues that are expected from the proposed action. The findings of this analysis (no significant impact) are incorporated by reference (per 40 CFR 1502.21) into this EA.

4.8 NOISE

Certain activities that would be associated with the proposed action or alternatives could influence the noise environment. Impacts on the environment would be related to the magnitude of noise caused primarily by vehicle and equipment noise associated with conversion of the MM II system to a MM III system. Noise-sensitive receptors, such as churches, hospitals, and wildlife could be adversely affected by equipment and traffic noises.

The basis of determining the significance of the impacts to the biological and human environment is primarily the difference between the baseline noise environment and that of the noise environment generated by any additional equipment or traffic noise associated with the proposed action. An appreciable increase in the background noise level (low 30 Ldn range) would be perceived as an annoyance impact. Increases in noise that exceed ambient noise levels by more than 5 dBA would be clearly noticeable and represent an adverse impact. A noticeable decrease in noise levels would represent a beneficial impact.

4.8.1 ANALYSIS METHODS

The analysis was based on review of a number of sources: publications; transportation and noise data; and, maps of the deployment area. The review focused on the current and projected noise levels from ground traffic and air traffic. The difference in noise levels was compared to

determine whether a significant annoyance impact would occur or is occurring.

4.8.2 POTENTIAL IMPACTS OF THE PROPOSED ACTION

The noise levels generated by the TEs, PTs, RV/G&C vans, and other AF vehicles involved in the conversion process would be comparable to the existing noise of normal missile movement operations, as described in section 3.8. Vehicles at Malmstrom AFB are involved in the transport of several rocket boosters and other missile components per month. A return to 1990 Air Force vehicular traffic volume is expected to occur during the conversion. Thus, noise levels should be similar to 1990 levels. These locations include US Highway 87/89, 57th Street (US 87) Bypass, 2nd Avenue North, 10th Avenue South, 10th Avenue North, and primary and secondary streets within the base and the southeast section of Great Falls. Air Force vehicular traffic involved in the transport of rocket components represents an incremental fraction of total traffic volume on these roads. Hence, Air Force vehicular traffic is not expected to cause ambient noise level to increase by more than 5 dBA and would not represent an adverse impact. Noise levels from traffic in the deployment area would not be expected to appreciably increase from normal levels. The emplacement of the MM III will not involve any loud single noise events that would startle wildlife. Consequently, no adverse impacts are expected to the noise environment of the deployment area during the conversion. After conversion, traffic noise associated with the LF and MAF sites would continue, producing no net change in noise.

The main mode of transport for the MM III rocket boosters to Malmstrom AFB is by Interstate highway. One missile movement per week on an interstate would create a negligible increase in noise.

The magnitude of equipment noise at the LFs would be comparable to that of the AF equipment routinely used for missile removal and replacement. Consequently, the noise impacts from equipment at the LF would be negligible.

4.8.3 POTENTIAL IMPACTS OF THE NO ACTION ALTERNATIVE

Continued operation of the current system would not change the present noise environment. Normal missile removal and replacement, maintenance, and other activities would continue. No new noise impacts would occur.

4.8.4 MITIGATION MEASURES

While no significant noise impacts are expected to occur, the following mitigation measure could be implemented to reduce noise impacts and provide a more pleasant living environment:

Maintain any equipment used during the conversion according to EPA product standards.

4.8.5 UNAVOIDABLE IMPACTS

The continued noise generated transporters, and missile maintenance and conversion equipment represents an adverse unavoidable impact to the noise environment of the base and the deployment area during and following the conversion process. However, the proposed action represents no significant change to the affected environment and thus no additional significant adverse unavoidable impacts will occur during and following the conversion process.

4.9 TRANSPORTATION

The transportation network at the MSB, and to, from, and within the deployment area could be adversely affected by the proposed action. Damage or deterioration of roads, annoyance of drivers with additional traffic, and increased risk of traffic accidents are some of the impacts that could occur. Impacts to the transportation system would be significant if the level of service (LOS) is reduced below level B, major repairs to the roads would be necessary as a result of activities associated with the proposed action, or the accident rate increases by more than 2 percent. Negligible impacts would occur if the LOS remains at B or A levels, the accident rate varies by less than 2 percent, or the roads only need minor repairs. Beneficial impacts would include an improvement in the LOS from B to A or a decrease in the accident rate by 2 percent.

4.9.1 ANALYSIS METHODS

The analysis is primarily concerned with assessing changes from existing road conditions, traffic safety, and traffic volume as a result of implementing the proposed action. Information provided by Malmstrom AFB and by the Montana Department of Transportation on the traffic routes, type of vehicles, and frequency of trips were examined and compared to baseline conditions to determine if a significant adverse affect would likely occur under the proposed alternative.

4.9.2 POTENTIAL IMPACTS OF THE PROPOSED ACTION

A typical maintenance schedule involves removing between one to two missiles and transporting them from LFs to the MSB for servicing each month. The MM II silos are currently empty so the increase of one missile movement per week would slightly increase operations from their 1991 rate (USAF, 1991). A total of 120 MM III missiles would be emplaced over a 30 month time period, each MM III missile requiring the use of two PTs, as well as a TE and other vehicles. Under the proposed action, approximately one MM III missile a week will be moved from GFAFB and emplaced at MAFB. Over the long term, the MM III missiles are more reliable than the MM II missiles and the mileage driven by vehicles supporting the 341 MW mission is expected to be slightly less than what was previously required. The LOS for the routes traveled by the

vehicles involved in the conversion process, and for general maintenance, operation, and protection of the system, is not projected to change and the transportation network would be negligibly affected. A negligible impact is expected because the routes tend to be used during off-peak hours and the LOS is generally stressed the most during peak rush hours.

Assuming the current rate of accidents per mile driven (several minor accidents per several hundred thousand miles), would be similar under the proposed action, an increase in mileage associated with the proposed action would likely lead to several more accidents per year, although the increase from current levels is not expected to be significant.

The level of service (LOS) for the roads that are part of the transportation network between the deployment area and the MSB is at level A and B for the majority of the routes. The LOS for transportation network between GFAFB and MAFB is at level A. The traffic counts on the more heavily traveled roads indicate (as shown in section 3.9 of the Final environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III system at Malmstrom Air Force Base, Montana) that the number of Air Force vehicles supporting the 341 MW mission constitute a negligible proportion of the overall traffic flow. The route between GFAFB and MAFB supports even heavier traffic (interstate highway) and one missile movement per week on these roads is negligible. Therefore, the LOS would not be degraded as a result of implementing the proposed action.

Funding for the upkeep and improvement of the TE routes and other roads would continue under the proposed action; no degradation in road quality should occur.

4.9.3 POTENTIAL IMPACTS OF THE NO ACTION ALTERNATIVE

No significant change from the present LOS, accident rates, and road deterioration would occur under this alternative. Normal maintenance, supply, communications, and security trips to and from the LFs and MAFs would continue. Additionally, funds for the upkeep and improvement of gravel TE routes would continue.

4.9.4 MITIGATION MEASURES

While no significant transportation impacts are expected to occur, the following mitigation measure could be implemented to reduce the risk of increasing the LOS and accident rate:

- Flexible work schedules can be established to reduce peak-hour traffic flows.

4.9.5 UNAVOIDABLE IMPACTS

The increase in traffic predicted for the proposed action would be an unavoidable impact. This traffic increase would likely have a short-term negligible impact.

4.10 SOCIOECONOMICS

The socioeconomic environment would be affected by the proposed conversion. The resulting changes in housing demand, services, and employment are evaluated to determine the significance of impacts. A significant adverse impact is a decrease of more than 2 percent annually from the projected level of the socioeconomic characteristic. In the short-term, a decline of this magnitude could weaken local labor and housing markets as well as local services. In the long term, it could change a community's existing structure and organization. A negligible impact represents an annual change of less than 2 percent from the projected level of the socioeconomic characteristic. This change would not be noticeable in housing demand, school enrollment, public service demands, or local government revenues or expenditures. Beneficial impacts were identified without regard to a specific level. A beneficial impact results from increased growth that strengthens employment opportunities and the local tax base, but without stressing community infrastructure and fiscal resources.

Current, estimates are that thirteen additional military personnel are required for the proposed action. Section 4.10.1 through 4.10.5 of the Final Environmental Assessment: Conversion of the Minuteman II Missile System to the Minuteman III System at Malmstrom Air Force Base, Montana (USAF, 1991) includes an analysis of socioeconomic effects of the proposed action. The findings of this analysis are incorporated by reference (per 40 CFR 1502.21) into this EA.

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5.0 CUMULATIVE IMPACTS

5.1 DESCRIPTION OF ACTIONS

<u>Deactivation of 321 MG</u>: As a result of the 1995 Base Realignment and Closure Commission the 321 MG will loose their Minuteman III missiles and be placed in caretaker status.

KC-135 Air Refueling Group: As result of the 1995 Base Realignment and Closure Commission the 43rd Air Refueling Group (ARG) will be moved from Malmstrom AFB to MacDill AFB, FL. The support facilities for the 43rd ARG will either be reutilized or shut down.

5.2 CUMULATIVE IMPACT ANALYSIS

The Minuteman III missiles will be removed from GFAFB missile field and the LFs and MAFs at GFAFB will be placed in caretaker status. Hazardous materials and waste will be removed from the sites. The LFs and MAFs will generate waste as conditionally exempt small quantify generators, approximately 110 pounds of hazardous waste will be generated at each LF and 10 pounds per MAF. All fuel and used oil products will be brought back to the base for reuse or sold to a contractor for reuse. MAF lagoons will remain operational and operated in accordance with a NPDES Permit.

The proposed action at Malmstrom AFB consists primarily of a series of repetitive actions at isolated locations. Impacts at particular sites (e.g. dust or traffic congestion), although negligible when considered separately, could have the potential to constitute a significant impact when considered collectively. Because no significant impacts to the biophysical environment have been identified for the proposed action, the likelihood of a cumulative effect occurring is negligible. Additionally, significant cumulative impacts for the proposed action or no action alternative are unlikely to occur because of the long distances between sites and the fact that only several sites may be hosting conversion activities at any one time.

Previous environmental analysis and documentation completed for the force structure change, realignment of 8 KC-135Rs from Malmstrom AFB to Fairchild AFB, WA in 1994, indicated that no significant impacts would result from the realignment of the aircraft. MacDill AFB is responsible for completion of the environmental assessment for the realignment of the 43rd ARG to MacDill AFB. However, no significant adverse cumulative impacts are expected from this action. Some environmental resources should improve at Malmstrom AFB due to the action. Specifically, air emissions, noise levels, and waste generation should decrease.

In conclusion, there is not a situation that, by itself is considered a negligible impact, but which would become cumulatively significant when evaluated with interrelated impacts from other actions.

6.0 PREPARER

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Mr. Timothy Neu Environmental Engineer 341 CES/CEVP 39 78th Street North Malmstrom AFB MT, 59402-7536

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Finding Of No Significant Impact

FINDING OF NO SIGNIFICANT IMPACT

ENVIRONMENTAL ASSESSMENT FOR THE DEPLOYMENT OF 120 MINUTEMAN III MISSILES AT MALMSTROM AFB

INTRODUCTION

As a result of the 1995 Base Realignment and Closure Commission, the Air Force plans to deploy 120 Minuteman III missiles at Malmstrom AFB (MAFB) starting in October 1995. The missiles will deployed from the deactivation of the 321st Missile Group (321 MG) which is located at Grand Forks AFB (GFAFB).

THE ACTION

The 341 MW operates and maintains the Minuteman missile system at Malmstrom AFB, Montana. Of the 200 launch facilities (LFs) in the deployment area of Malmstrom AFB, 120 are unarmed and 80 have MM IIIs in place. The U.S. Air Force will remove 120 missiles from GRAFB and emplace them at Malmstrom AFB. This action is a continuation of the of the program to phase out Minuteman II missiles at Malmstrom AFB with a subsequent conversion to Minuteman III missiles.

The missiles will be removed and emplaced in the LFs using current procedures. The same transport, maintenance, and support vehicles as under existing maintenance operations will be utilized. The removal and transport of missiles from the LFs will not introduce any new procedures or techniques; the same methods applicable to current MM III operations will be applied to this action. The procedures are proven and will involve experienced personnel. Missile movements in the deployment area will increase during the conversion. Activities at each LF involving missile emplacement will occur within the fenced security area.

Taking no action was the only alternative fully evaluated for the deployment process at Malmstrom AFB. The maintenance and security operation would continue under this action.

ENVIRONMENTAL EFFECTS

An evaluation of the deployment process of the MM IIIs has identified an overall insignificant impact to the environment.

The proposed action will have negligible impacts to the geological, water, biological, and cultural resources. Any sensitive noise receptors within the deployment area would be affected to the same extent as under existing operations. During the conversion process, there will be additional activity at the LFs and a slight increase (fewer than an estimated 20 trips) in the number of trips by the transporter-erector, maintenance, and support vehicles along 10th Avenue South in Great Falls, MT. These actions will have a temporary adverse impact on the local air quality by increasing fugitive dust and air pollutant emissions. However, the impact will be short-term and insignificant. Because the MM III system is more operationally reliable

than the MM II system, the long-term impact of converting the system would be beneficial because of the reduction in the amount of maintenance and vehicle trips to the deployment area.

Although there will be a short-term increase in the number of vehicle trips, the accident rate is expected to remain relatively constant because use of the local and regional transportation network occurs primarily during off-peak hours. The likelihood of the conversion process having an affect to the health and safety of workers exposed to hazardous materials is low because of the low quantities of hazardous materials handled, the mechanics of the handling process, and the required use of safety equipment. The impact from a transportation accident that would cause a propellant fire or release of radioactive material would be significant within the immediate accident vicinity. However, the risk (probability and consequences) of an accident is negligible.

Existing safety programs ensure that the probability of accidents in handling and transporting missile components is remote. The probability of a release of radioactive material is even less than the probability of an accident occurring. In approximately 30 years of handling MM systems, there has not been a rocket motor propellant fire or an incident involving accidental nuclear detonation or plutonium release.

The local socioeconomic environment will not experience any significant impacts. The action will result in a temporary increase in the number of personnel at Malmstrom AFB.

The Base Civil Engineer has the responsibility to ensure the conversion process complies with all applicable Federal, State, and local environmental regulations.

CONCLUSION

In accordance with the Council on Environmental Quality regulations implementing the National Environmental Policy Act of 1969, as amended, and Air Force Regulation 19-2, an assessment of the identified environmental effects has been prepared. It has been determined that the conversion to the MM III system will have no significant impacts on the quality of the human environment and no mitigation measures are necessary or required. Thus, an environmental impact statement is not required.

WAYNE N HANSEN, Colonel, USAF

Chairman

Base Environmental Protection Committee

1 OCT 1995

Date Approved



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AIR FORCE SPACE COMMAND



2 4 MAR 1997

MEMORANDUM FOR

21 CES/CEV

30 CES/CEV

45 CES/CEV

50 CES/CEV

90 CES/CEV

341 CES/CEV

721 CES/CEV

FROM: HQ AFSPC/CE

150 Vandenberg Street, Suite 1105 Peterson AFB CO 80914-4150

SUBJECT: AFSPC Biodiversity Initiative Implementation (AFSPC Env Policy P97015)

- 1. As part of the new Department of Defense (DoD) Biodiversity Conservation strategy, we are changing our environmental natural resources management approach. This change entails a shift from a single-species to an ecosystem management approach to natural resources programs.
- a. The first step in the implementation of this new initiative is providing you a copy of Conserving Biodiversity on Military Lands: A Handbook for Natural Resources Managers (Atch 1). This handbook is the final product of the Keystone Dialogue on Biodiversity Conservation on Military Lands and was produced by The Nature Conservancy in cooperation with the DoD. We have provided the previous two Biodiversity products (Atchs 2 & 3) to you in a 3 Jan 97 AFSPC Env Crossfeed (C97004).
- b. The second step of the Biodiversity initiative implementation will be a training session for all AFSPC natural resources managers. The training curriculum is being developed and will be given in the Aug-Sep timeframe. TDY funds have been reserved at the HQ to facilitate attendance by your natural resources staff. Further details on the time and location of the training session will follow.

2. Should you or your staff have any questions, my principal point of contact is Mr. Randall D. Rowland, DSN 692-9915.

Chief, Environmental Quality

Attachments:

- 1. Conserving Biodiversity on Military Lands Handbook
- 2. DoD Commanders Guide to Biodiversity
- 3. Policy Dialogue on DoD Biodiversity Management Strategy

We are dedicated to improving our products and services to you our customer. Please help us in this endeavor by completing the following survey. Please fold, stable, and drop in distribution when complete.

Please circle the appropriate response for each question below as they pertain to the attached policy, procedure or guidance. Comments are encouraged as well.

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4. This policy/pro	ocedure/guidance w	as necessary and a benef	it in doing my job.
Agree	Disagree	Don't Know	Does not Apply
Comments:			
(Optional) Name:	Organ	nization:	Phone:

Thank You!

HQ AFSPC/CEV (MICHELLE LINN) 150 VANDENBERG ST, STE 1105 PETERSON AFB CO 80914-4150 OFFICIAL BUSINESS

PRELIMINARY ENVIRONMENTAL IMPACT ANALYSIS ACS:					antroi Symbol					
ISTRUCTIONS: Section I to be completed by Proponent, as necessary. Reference appropriate ite	Sections II and III to be completed by Environmental Planning Function	. Contin	ue on s	eparat	e shee	ts				
ECTION I - PROPONENT INFORMATION										
1. TO (Environmental Planning Function) 2. FROM (Proponent organization and functional address symbol) HO ARSPC/CEV						2a. TELEPHONE NO. (719) 554-5466				
. TITLE OF PROPOSED ACTION	DRAFT									
eployment of Minuteman III missiles at Mal	mstrom AFB									
PURPOSE AND NEED FOR ACTION (Identity decision ee Attachment	*									
5. DESCRIPTION OF PROPOSED ACTION AND ALTERN see Attachment	ATIVES (DOPAA) (Provide sufficient details for evaluation of the total a	action.)								
6. PROPONENT APPROVAL (Name and Grade) 68. SIGNATURE						6b. DATE				
SECTION II - PRELIMINARY ENVIRONMENTAL S	URVEY. (Check appropriate box and describe potential environmente itive effect; 0 = no effect; " = adverse effect; U = unknown effect)	i effects	+	0	-	υ				
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND										
8. AIR QUALITY (Emissions, attainment status, state	implementation plan, etc.)									
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15. SOCIOECONOMIC (Employment/population project	tions, school and local fiscal impacts, etc.)		1	1	-	+				
16. OTHER (Potential impacts not addressed above.)										
SECTION III - ENVIRONMENTAL ANALYSIS DE	TERMINATION									
17. PROPOSED ACTION QUALIFIES FOR CATE	GORICAL EXCLUSION (CATEX) #; OR									
18. REMARKS	FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.									
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AF FORM 813, MAY 93. CONTINUATION SHEET

4.0 Purpose and Need for Action

- 4.1 As a result of the FY 95 Base Realignment and Closure Commission, an additional 120 Minuteman III missiles will be deployed at Malmstrom AFB with the 321 deactivation. The deployment is necessary to support USSTRATCOM requiremnets.
- 5.0 Description of Proposed Actions and Alternatives
 - 5.1 Malmstrom AFB proposes to place approximately 120 minuteman III missiles in silos currently configured to accept Minuteman II missiles. The deployment is proposed to start in October of 1995 and will continue for a three year period.
 - 5.2 Environmental Issues Hazardous waste generation Solid waste generation Air quality Missile transportation
 - 5.3 Description of Alternatives
 - 5.3.1 No-action Alternative: Do not deploy missiles at Malmstron AFB
 - 5.3.2 Proposed Action Alternative: Deploy 120 missiles at Malstrom AFB

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T	imothy D.	Neu GS	-11	CEVP		6437		tdn	11 Oct 95
SU	BJECT	Environme	ntal Assessment	for Conversion	n to	Minutema	an III mis	siles	DATE
									2 Oct 95

- 1. PURPOSE: To meet the environmental requirement for this action.
- 2. BACKGROUND: The National Environmental Policy Act requires all major Federal actions to be assessed for environmental effects. This Environmental Assessment fulfills this requirement.
- 3. DISCUSSION: It has been determined that this action is required and this document is needed to commence this action.
- 4. RECOMMENDATION: Sign the attached finding of no significant impact.

ROBERT J. MORETTI, GM-14

Deputy Base Civil Engineer

1 Tab

Environmental Assessment



DEPARTMENT OF THE AIR FORCE 341ST MISSILE WING (AFSPC)

2 October 1995

MEMORANDUM FOR Intergovernmental Review Clearinghouse

FROM: 341 CES/CD

SUBJECT: Submission of Draft Environmental Assessment to the SPOC.

- 1. Enclosed is a copy of the Draft Environmental Assessment for the current action and the Final Environmental Assessment this document is tiered from.
- 2. Malmstrom is soliciting your written comments until 9 October 1995. Any comments should be addressed to:

341 CES/CEVP 39 78th Street North Malmstrom AFB, MT 59402

3. Please contact Mr. Timothy Neu at Ext. 6437 with any questions.

ROBERT J. MORETTI, GM-14 Deputy Base Civil Engineer MEMORANDUM FOR 341 MW/PA

FROM: 341 CES/CD

SUBJECT: Review Public Notice for submission in Great Falls Tribune.

1. Please review the following Public Notice. Please contact Mr. Tim Neu at Ext. 6437 with questions and comments.

ROBERT J. MORETTI, GM-14 Deputy Base Civil Engineer

NOTICE

MALMSTROM AFB Draft Environmental Assessment

Malmstrom AFB prepared an environmental assessment for the deployment of 120 Minuteman III missiles. The draft document is located at the public horary for feview. Malmstrom is soliciting your comments until 9 October 1995. Any comments should be addressed to:

> 341 CES/CEVP 39 78th Street North Malmstrom AFB, MT 59402 or phone 731-4043

> > Lt colomn 2475

SIGN IN SHEET

BASE AND MISSILE COLD WAR SURVEY

MALMSTROM AFB

17 JULY 96

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Tim Neu	34/ CES/CEV9	731-6437
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