MITIGATION MONITORING PLAN
FOR

FT. GREELY, ALASKA
MISSILE DEFENSE SYSTEM TEST BED
SITE PREPARATION ACTIVITIES

BASED ON THE
NATIONAL MISSILE DEFENSE
DEPLOYMENT FINAL ENVIRONMENTAL IMPACT STATEMENT

AUGUST 2001

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1.0 INTRODUCTION

Actions to be taken to mitigate potential environmental impacts are typically identified in National Environmental Policy Act (NEPA) documentation. When these mitigation measures are "committed to" in decision documents (Findings of No Significant Impact (FONSIs) or Records of Decision (RODs)), the Program Proponent has a legal obligation to fully implement the mitigation. The Ballistic Missile Defense Organization (BMDO) is committed to minimizing the potential environmental impacts from its site preparation activities at Fort Greely, Alaska by instituting a mitigation monitoring and execution process to mitigate the impacts of those activities analyzed in the National Missile Defense (NMD) Deployment Final Environmental Impact Statement (EIS). Note in 2001, the NMD program is being re-designated as the Ground Based Midcourse Element (GBME) of the Missile Defense System (MDS). The MDS Test Bed is a down-scoped version of the deployment proposal analyzed in the NMD EIS.

BMDO has overall responsibility for implementing mitigations identified in the EIS. BMDO is committed to addressing those mitigations associated with the MDS Test Bed site preparation actions described in the Record of Decision (ROD) to which this document is attached.

1.1 PURPOSE

The purpose of this Mitigation Monitoring Plan is to:

(1) Define the mitigation monitoring and execution requirements associated with the MDS test bed site preparation activities at Ft. Greely, Alaska.

(2) Define the process to be used to identify, execute, track and confirm completion of the EIS mitigation actions related to MDS Test Bed site preparation activities.

(3) Establish roles and responsibilities and implementing procedures to effectively execute the mitigation process.

1.2 SCOPE

This plan describes the mitigation monitoring and execution approach, responsibilities, and procedures associated with MDS Test Bed site preparation activities at Ft. Greely, Alaska.

2.0 SOURCES OF MITIGATION MONITORING REQUIREMENTS

The mitigation measures for this plan have been taken from the EIS and MDS Test Bed site preparation ROD. The DoD, BMDO and service regulations require completion of mitigations and, in many cases, confirmation that they have been completed.

3.0 IDENTIFICATION OF "TRIGGERING" EVENTS FOR MITIGATION REQUIREMENTS

Events that may trigger the implementation of mitigation requirements include, but are not limited to:

(1) Initiation of site preparation

(2) Transport of materials or equipment in support of site preparation

(3) Expansion of current activities into new locations

(4) Change in schedule or duration of current activities

4.0 MITIGATION MONITORING PROCESS

Figure 1 depicts the EIS mitigation monitoring process. Each step is explained below.

4.1 PROCESS TO IDENTIFY/CAPTURE MITIGATION REQUIREMENTS

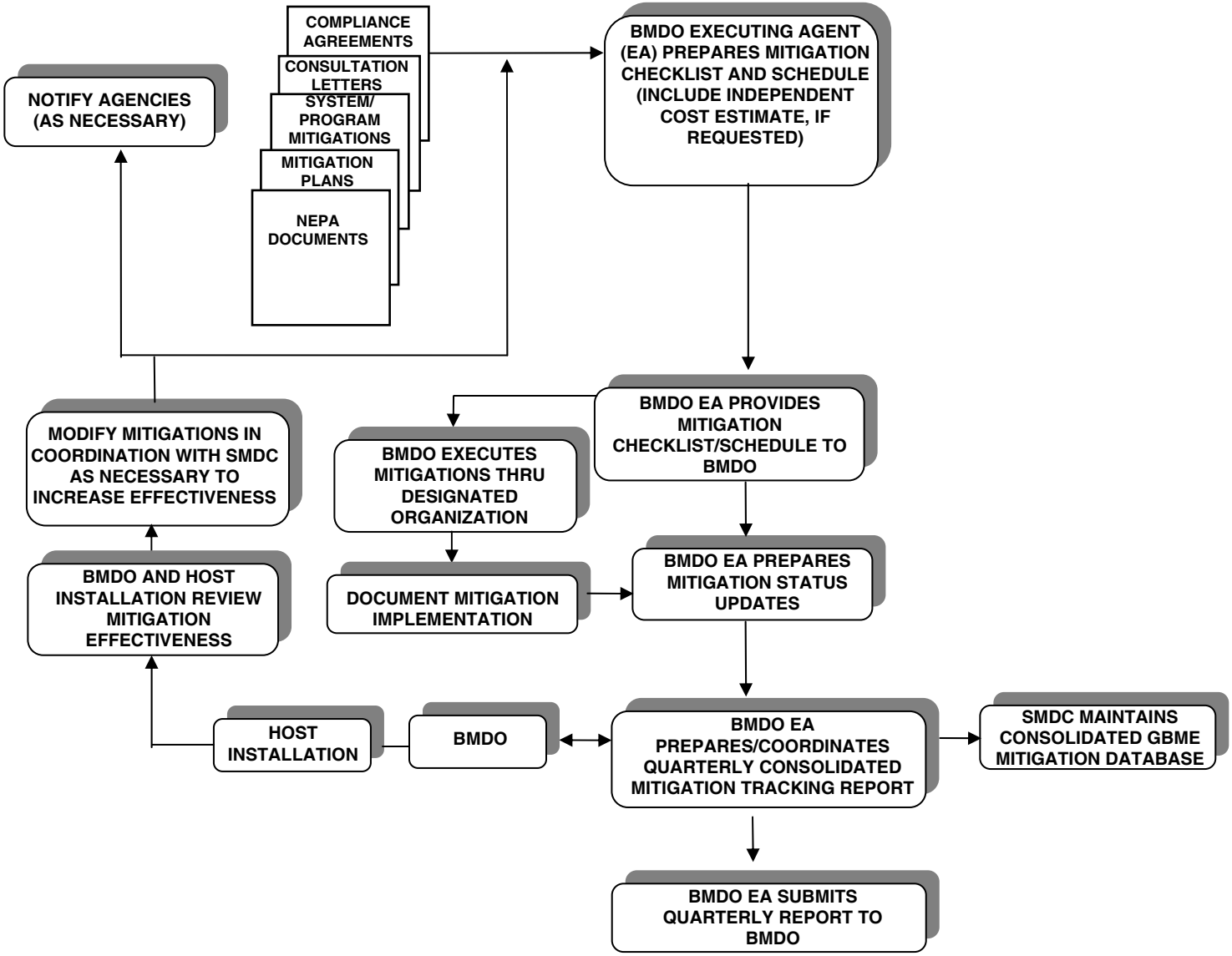
Mitigation requirements will be identified and captured by obtaining or compiling the lists of committed actions found in the EIS and MDS Test Bed site preparation ROD.

4.2 PREPARATION OF CHECKLISTS AND SCHEDULES

(1) The BMDO and its Executing Agents (EAs) (i.e., U.S. Army Space and Missile Defense Command (USASMDC)) prepare the mitigation checklists and schedules.

(2) Consolidated mitigation checklists will list mitigation measures by program and cite the source document. Appendices A and B contain the current mitigation requirements for the preferred alternative in the EIS. The Mitigation Checklist (Appendix A) and the Standard Operating Procedures (SOP) Checklist (Appendix B) are both required to be implemented prior to initiating the proposed action.

BMDO MITIGATION MONITORING PROCESS



(3) Based on the BMDO's overall program schedule, the EA will develop and update, as needed, a mitigation schedule for each checklist.

(4) The mitigation schedule will identify when mitigation measures should be implemented with respect to executing the proposed action. The mitigation schedule will be prepared in coordination with BMDO. The schedule will help ensure that triggering events are identified and that sufficient lead-time is given to resource and implement mitigation actions.

4.3 MITIGATION COST ESTIMATES

If requested, the EA will develop cost estimates for implementing mitigations. Cost estimates of proposed mitigations are a useful tool to help support evaluation of alternatives, both in the context of NEPA analyses and during consideration of alternative compliance actions.

4.4 PROCESS TO DOCUMENT MITIGATION ACCOMPLISHMENT

(1) After appropriate coordination with the BMDO, the EA will provide the mitigation checklists and schedule to the BMDO and to the organization(s) responsible for completing the mitigation checklist(s).

(2) Although the BMDO has overall responsibility for executing the mitigations, completing the mitigation checklist may be assigned to organizations that will be executing the proposed action and associated mitigation actions. For example, mitigations related to site preparation activities may be assigned to the appropriate Corps of Engineers agency. The host installation may also be required to implement selected mitigations. The Mitigation Checklist found in appendix A identifies the executing organization responsible for completing the checklist.

(3) The executing organization documents the implementation status of individual mitigation actions identified on the checklist.

(4) After completion of each mitigation measure, the following columns on the mitigation checklist should be filled out as stated below:

- Date – The date the mitigation measure was completed

- Verified By – Person or group responsible for the verification of the completed mitigation measure. Included should be the person or group's telephone number.

- Remarks – Comments to state that the mitigation was completed, not completed, or not applicable. In either case, a brief explanation should accompany the disposition of the mitigation.

4.5 REPORTING REQUIREMENTS

(1) Following completion of the checklist to document actions taken on the mitigations, the executing organization will forward the completed checklist through the BMDO to the EA.

(2) Quarterly, BMDO will prepare and coordinate a consolidated mitigation tracking report.

(3) The BMDO will ensure host installations are provided a copy of the Quarterly Mitigation Monitoring Report, which addresses mitigations related to the host installation.

5.0 MITIGATION EFFECTIVENESS EVALUATION

The BMDO and mitigation executing organizations are responsible for ensuring the mitigation measures are properly implemented and they are environmentally effective; that is they minimize potential impacts to within set government standards or within other limits established in the associated environmental documents. Should mitigation actions not prove adequately effective, modifications to the mitigations or to program activities may be necessary. Such changes may require coordination with the appropriate regulatory agencies. In addition, the EA should be notified as part of mitigation monitoring updates.

6.0 RESPONSIBILITIES/IMPLEMENTATION:

6.1 The Executing Agent (EA) for BMDO will:

(1) Prepare mitigation and SOP checklists based on the BMDO's implementation of the mitigation schedule.

(2) Provide the BMDO and executing organizations the mitigation and SOP checklists and cost estimates (if requested) to implement the mitigation.

(3) Prepare and coordinate the quarterly consolidated mitigation tracking report with the BMDO.

(4) Provide quarterly, the consolidated mitigation tracking report to the BMDO.

(5) Maintain a mitigation database.

6.2. The BMDO will:

(1) Coordinate with appropriate executing organizations and the BMDO EA in preparation of mitigation checklists.

(2) Monitor and assist in documenting the implementation status of mitigation actions identified on the checklists.

(3) Review mitigation effectiveness, as necessary.

6.3 The Executing Organizations will:

(1) Execute the mitigations.

(2) Document the implementation status of individual mitigation actions identified on the mitigation and SOP checklists.

(3) Submit completed mitigation and SOP checklists through the BMDO to the EA.

(4) Review and evaluate the effectiveness of mitigation measures, as appropriate.

(5) As directed by the BMDO, modify mitigation measures to increase effectiveness.

Appendix A

Mitigation Checklist for Ground Based Midcourse Element (GBME) (formerly known as the National Missile Defense (NMD) program) Site Preparation Activities at Fort Greely, Alaska for the Missile Defense System (MDS) Test Bed

MITIGATION CHECKLIST FOR GROUND BASED MIDCOURSE ELEMENT (GBME) (FORMERLY KNOWN AS THE NATIONAL MISSILE DEFENSE (NMD) PROGRAM) SITE PREPARATION ACTIVITIES AT FORT GREELY, ALASKA FOR THE MISSILE DEFENSE SYSTEM (MDS) TEST BED

-Location --Mitigation	REF. PG. #	EXEC. ORG.	ACTIVITY	VERIFIED BY	DATE	REMARKS
GROUND-BASED INTERCEPTOR (GBI)						
Fort Greely						
I. AIR QUALITY						
• Implement standard dust suppression techniques to minimize fugitive dust emissions.	4-97	CEPOA	C			
II. CULTURAL RESOURCES						
• Obtain concurrence from the Alaska SHPO on the archaeological survey.	4-125	BMDO	C			
• Cease activities in the immediate area, if during the course of MDS Test Bed site preparation activities cultural materials (particularly human remains) are unexpectedly discovered and notify the Alaska SHPO through the Fort Greely environmental office. Follow the guidance provided in 36 CFR 800.11 and NAGPRA for subsequent actions.	4-126	CEPOA	C			
III. GEOLOGY AND SOILS						
• Avoid permafrost areas where possible.	4-134	CEHNC	C			
IV. HAZARDOUS MATERIALS AND HAZARDOUS WASTE MANAGEMENT						
• Avoid Landfill 6 to the extent possible during MDS Test Bed site preparation activities.	4-147	CEHNC	C			

ACTIVITY KEY: C = CONSTRUCTION
REFERENCE: NATIONAL MISSILE DEFENSE DEPLOYMENT EIS, JUNE 2000
UPGRADED EARLY WARNING RADAR, SUPPLEMENT TO THE NMD DEPLOYMENT EIS, JUNE 2000
Revised 07/31/01

Appendix B

Standard Operating Procedures for Ground Based Midcourse Element (GBME)
(formerly known as the National Missile Defense (NMD) program)
Site Preparation Activities
at Fort Greely, Alaska for the
Missile Defense System (MDS) Test Bed

-Location --Mitigation	REF. PG. #	EXEC. ORG.	ACTIVITY	VERIFIED BY	DATE	REMARKS
GROUND-BASED INTERCEPTOR (GBI)						
Fort Greely						
I. AIR QUALITY						
• Conduct site preparation activities in accordance with applicable regulations and permits.	4-94	CEPOA	C			
II. GEOLOGY AND SOILS						
• Use Best Management Practices to reduce the potential for soil erosion at the MDS Test Bed site which could include limiting the amount of area exposed, creating sediment basins to control flow, and adding protective covering to the slopes.	4-134	CEPOA	C			
• Stabilize all disturbed areas as quickly as possible, e.g., through compaction. Stabilization must be initiated no later than 14 days after site preparation has temporarily or permanently stopped except: (1) when site preparation resumes within 21 days of previous suspension of activities, and (2) when initiation of stabilization is precluded by snow cover or frozen ground, then initiate as soon as practicable.	CEPOA SOW Sec. 01411	CEPOA	C			
• Install seed in specified areas from 15 May – 15 August. If not completed by 15 August, delay until after 15 September but no later than when 2 inches of crestless snow is present.	CEPOA SOW Sec. 02921	CEPOA	C			
• Finished grades will be IAW drawings prior to seeding.	CEPOA SOW Sec. 02921	CEPOA	C			
• Surface erosion control material will be installed as directed.	CEPOA SOW Sec. 02921	CEPOA	C			

ACTIVITY KEY: C = CONSTRUCTION
REFERENCE: NATIONAL MISSILE DEFENSE DEPLOYMENT EIS, JUNE 2000
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-Location --Mitigation	REF. PG. #	EXEC. ORG.	ACTIVITY	VERIFIED BY	DATE	REMARKS
III. HAZARDOUS MATERIALS AND HAZARDOUS WASTE MANAGEMENT						
• Handle a hazardous waste leak in accordance with appropriate regulations.	4-146	CEPOA/ BMDO	C			
• Handle all hazardous waste generated at the MDS Test Bed site through the base's treatment, storage and disposal facility.	4-147	CEPOA/ BMDO/	C			
• Implement the GBME-wide Pollution Prevention Plan for MDS Test Bed site preparation activities at Fort Greely.	4-147	CEPOA/ BMDO	C			
• Comply with the base Pollution Prevention Plan.	4-147	CEPOA/ BMDO	C			
• Coordinate activities with the appropriate installation program and state regulators, before beginning MDS Test Bed site preparation, to minimize impacts to remediation efforts and other on-going activities.	4-147	CEPOA/ BMDO	C			
• Apply pesticides in accordance with Fort Greely's Integrated Pest Management Plan using personnel certified as pesticide applicators.	4-149	CEPOA/ SMDC	C			
IV. HEALTH AND SAFETY						
• Establish appropriate firebreaks around the facility to avoid potential forest fires.	4-171	CEHNC	C			

ACTIVITY KEY: C = CONSTRUCTION
REFERENCE: NATIONAL MISSILE DEFENSE DEPLOYMENT EIS, JUNE 2000
UPGRADED EARLY WARNING RADAR, SUPPLEMENT TO THE NMD DEPLOYMENT EIS, JUNE 2000
Revised 07/31/01

-Location --Mitigation	REF. PG. #	EXEC. ORG.	ACTIVITY	VERIFIED BY	DATE	REMARKS
V. TRANSPORTATION						
• Conduct a pre-road survey of the roadways potentially impacted by MDS Test Bed site preparation activities prior to initiation of the activities to determine the current condition.	4-222	CEHNC/ BMDO	C			
VI. WATER RESOURCES						
• Minimize impacts to water resources resulting from accidental spills of hazardous materials during site preparation by following spill prevention, control, cleanup and emergency response procedures.	4-245; 4-246	CEPOA/ BMDO	C			

ACTIVITY KEY: C = CONSTRUCTION

REFERENCE: NATIONAL MISSILE DEFENSE DEPLOYMENT EIS, JUNE 2000
UPGRADED EARLY WARNING RADAR, SUPPLEMENT TO THE NMD DEPLOYMENT EIS, JUNE 2000

Revised 07/31/01