



# MISSILE DEFENSE AGENCY

ADMINISTRATIVE RECORD FOR MISSILE  
DEFENSE AGENCY (MDA) PROPOSED CATEGORICAL  
EXCLUSIONS (CATEXs) UNDER THE NATIONAL  
ENVIRONMENTAL POLICY ACT (NEPA)

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## TABLE OF CONTENTS

I.	DEVELOPMENT PROCESS.....	1
II.	CATEX LIST .....	3
III.	ADMINISTRATIVE RECORD FOR MDA CATEXS .....	7
B-1.	Normal personnel, fiscal or budgeting, and administrative activities and decisions including those involving military and civilian personnel (for example, recruiting, processing, paying, and record keeping).....	7
B-2.	Preparing, revising, or adopting regulations, instructions, directives, or guidance documents including those that implement without substantial change the regulations, instructions, directives, or guidance documents from higher headquarters or other Federal agencies.....	8
B-3.	Decreases, increases, relocation and realignment of personnel into existing Federally-owned or commercially-leased space that does not involve a substantial change affecting the supporting infrastructure or use of space (e.g., no increase in traffic beyond the capacity of the supporting network to accommodate such an increase). .....	10
B-4.	Routine procurement of goods and services conducted in accordance with applicable procurement regulations, Executive orders (EO), and policies to support operations and infrastructure, including routine utility services and contracts. ....	13
B-5.	Administrative study efforts involving no commitment of resources other than personnel and funding allocations. If any of these study efforts result in proposals for further action, those proposals must be considered separately by an appropriate CATEX or NEPA analysis .....	15
B-6.	Studies, monitoring, data and sample collection, and information gathering that involve no permanent physical change to the environment. If any of these activities result in proposals for further action, those proposals must be considered by an appropriate CATEX or NEPA analysis .....	20
B-7.	Sampling, well drilling and installation, analytical testing, site preparation and minimally intrusive physical testing. These activities could involve minor clearing and grubbing or movement of heavy equipment such as drill rigs. If any of these actions result in proposals for further actions, those proposals must be considered by an appropriate CATEX or NEPA analysis .....	26
B-8.	Immediate responses to the release or discharge of oil or hazardous materials in accordance with an approved Spill Prevention, Control and Countermeasure (SPCC) Plan or Spill Contingency Plan, or that is otherwise consistent with the requirements of the EPA National Contingency Plan.....	33

B-9.	Temporary use of transportable power generators or operational support equipment when located in a previously disturbed area and when operated in compliance with applicable regulatory requirements. ....	37
B-10.	Routine movement, handling, use and distribution of materials, including hazardous materials or wastes that are moved, handled, or distributed in accordance with applicable regulations, such as Resource Conservation and Recovery Act (RCRA), Occupational Safety and Health Administration (OSHA) and Hazardous Materials Transportation Act (HMTA).....	49
B-11.	Routine movement of mobile test assets (such as ships, aircraft, mobile sensors, telemetry, etc.) for routine missile defense test and evaluation, for repair, overhaul or maintenance, or for home port reassignments where no new support facilities are required. ....	58
B-12.	Activities and operations to be conducted in an existing non-historic structure which are within the scope of and are compatible with the present functional use of the building, will not result in a substantial increase in waste discharged to the environment, will not result in substantially different waste discharges from current or previous activities, and emissions will remain within established permit limits, if any. ....	67
B-13.	Acquisition, installation, modification, routine repair and replacement, and operation of utility (e.g., water, sewer, and electrical) and communication systems, mobile antennas, data processing cable, and similar electronic equipment that use existing rights-of-way, easements, distribution systems, facilities, or previously disturbed land.....	73
B-14.	Acquisition, installation or minor relocation, operation and maintenance or evaluation of physical security devices or controls to protect human or animal life and to enhance the physical security of existing critical assets in compliance with applicable Federal, tribal, state and local requirements to protect the environment .....	85
B-15.	Maintenance of archaeological, historical, and endangered or threatened species avoidance markers, fencing, and signs. ....	94
B-16.	Road or trail construction and repair on existing rights-of-ways or in previously disturbed areas which do not result in a change in functional use. Runoff, erosion, and sedimentation are controlled through implementation of best management practices (BMP) .....	97
B-17.	Routine repair and maintenance of buildings, vessels, aircraft, grounds, and other facilities and equipment which do not result in a change in functional use or a significant impact on a historically significant element or setting .....	102
B-18.	New construction or equipment installation or alterations (interior and exterior) to or construction of an addition to an existing structure that is similar to existing land use if the area to be disturbed has no more than 5.0 cumulative acres of new surface disturbance.....	109

B-19.	Demolition of non-historic buildings, structures, or other improvements and repairs that result in disposal of debris there-from, or removal of a part thereof for disposal, in accordance with applicable regulations, including those regulations applying to removal of asbestos containing materials (ACM), polychlorinated biphenyls (PCBs), lead-based paint (LBP), and other special hazard items.....	123
B-20.	Research, testing, and operations conducted at existing facilities and plants or laboratories (including contractor-operated laboratories and plants) and in compliance with all applicable safety, environmental and natural conservation laws. ....	132
B-21.	Routine installation and use of radars, telemetry systems, communications equipment, and other essentially similar facilities and equipment within a launch facility, mobile platform, military installation, training area, or previously disturbed area that conform to current American National Standards Institute/Institute of Electrical and Electronics Engineers (ANSI/IEEE) guidelines for maximum permissible exposure to electromagnetic fields .....	142
IV.	ACRONYMS AND ABBREVIATIONS .....	158
V.	QUALIFICATION OF PREPARERS.....	162

### LIST OF TABLES

Table B-5.1	Comparative Analysis of MDA Proposed CATEX B-5 to Other Agency CATEXs.....	18
Table B-6.1	Comparative Analysis of MDA Proposed CATEX B-6 to Other Agency CATEXs.....	24
Table B-7.1	Comparative Analysis of MDA Proposed CATEX B-7 to Other Agency CATEXs.....	31
Table B-8.1	Comparative Analysis of MDA Proposed CATEX B-8 to Other Agency CATEXs.....	35
Table B-9.1	Comparative Analysis of MDA Proposed CATEX B-9 to Other Agency CATEXs.....	43
Table B-9.2	Comparative Analysis of MDA Proposed CATEX B-9 to MDA Environmental Reviews .....	45
Table B-10.1	Comparative Analysis of MDA Proposed CATEX B-10 to Other Agency CATEXs.....	54
Table B-10.2	Comparative Analysis of MDA Proposed CATEX B-10 to MDA Environmental Reviews.....	56
Table B-11.1	Comparative Analysis of MDA Proposed CATEX B-11 to Other Agency CATEXs.....	63
Table B-11.2	Comparative Analysis of MDA Proposed CATEX B-11 to MDA Environmental Reviews .....	65
Table B-12.1	Comparative Analysis of MDA Proposed CATEX B-12 to Other Agency CATEXs.....	71
Table B-12.2	Comparative Analysis of MDA Proposed CATEX B-12 to MDA Environmental Reviews.....	72

Table B-13.1	Comparative Analysis of MDA Proposed CATEX B-13 to Other Agency CATEXs.....	81
Table B-13.2	Comparative Analysis of MDA Proposed CATEX B-13 to MDA Environmental Reviews.....	83
Table B-14.1	Comparative Analysis of MDA Proposed CATEX B-14 to Other Agency CATEXs.....	90
Table B-14.2	Comparative Analysis of MDA Proposed CATEX B-14 to MDA Environmental Reviews.....	92
Table B-15.1	Comparative Analysis of MDA Proposed CATEX B-15 to Other Agency CATEXs.....	96
Table B-16.1	Comparative Analysis of MDA Proposed CATEX B-16 to Other Agency CATEXs.....	100
Table B-17.1	Comparative Analysis of MDA Proposed CATEX B-17 to Other Agency CATEXs.....	106
Table B-17.2	Comparative Analysis of MDA Proposed CATEX B-17 to MDA Environmental Reviews.....	108
Table B-18.1	Comparative Analysis of MDA Proposed CATEX B-18 to Other Agency CATEXs.....	119
Table B-18.2	Comparative Analysis of MDA Proposed CATEX B-18 to MDA Environmental Reviews.....	121
Table B-19.1	Comparative Analysis of MDA Proposed CATEX B-19 to Other Agency CATEXs.....	128
Table B-19.2	Comparative Analysis of MDA Proposed CATEX B-19 to MDA Environmental Reviews.....	130
Table B-20.1	Comparative Analysis of MDA Proposed CATEX B-20 to Other Agency CATEXs.....	139
Table B-20.2	Comparative Analysis of MDA Proposed CATEX B-20 to MDA Environmental Reviews.....	141
Table B-21.1	Comparative Analysis of MDA Proposed CATEX B-21 to Other Agency CATEXs.....	153
Table B-21.2	Comparative Analysis of MDA Proposed CATEX B-21 to MDA Environmental Reviews.....	155

# **ADMINISTRATIVE RECORD (AR) FOR THE MISSILE DEFENSE AGENCY (MDA) PROPOSED CATEGORICAL EXCLUSIONS (CATEXs) UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)**

## **I. DEVELOPMENT PROCESS**

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MDA legal and environmental professionals, including four MDA civilians and five independent contractors, worked together as a Team to develop the MDA CATEXs and supporting administrative record. The environmental professionals on the Team were environmental practitioners with numerous years of planning and compliance experience, including preparing environmental documents such as assessments, impact statements, findings of no significant impact, and records of decision. The Team also included a legal practitioner with advanced education and experience advising Federal agency managers on environmental planning and compliance responsibilities. All of these professionals have significant experience developing and executing NEPA strategies for MDA and other agencies. Resumes for Team members are at the end of the AR.

To determine the types of MDA activities to consider for categorical exclusions, the Team reviewed all MDA NEPA documents and mitigation and monitoring reports to determine if MDA activities resulted in significant environmental impacts on the various military Service installations/ranges or other properties where these activities took place. The Team determined no significant adverse environmental impacts resulting from our activities were ever reported or observed through MDA's monitoring or host installation environmental staff observation. We also reviewed and characterized the types of activities we conduct for CATEXs being proposed, how those activities are conducted, and how often those activities are conducted to facilitate benchmarking and comparing similar activities conducted by the Services and other federal agencies.

The MDA NEPA implementing procedures define four screening criteria that must be met before a CATEX may be used and seven extraordinary circumstances that preclude using a CATEX. Some CATEXs require documentation using a record of environmental consideration (REC) the proposed action qualifies as a CATEX and screening criteria are met (Appendix C of Implementing Procedures). The MDA RECs are signed statements, submitted with project documentation briefly documenting a MDA action has received environmental review. The REC will briefly describe the proposed action and timeframe, identify the proponent and approving official(s), and clearly show how a particular action qualifies for a CATEX. When used to support a CATEX, the REC will address our use of screening criteria to ensure no extraordinary circumstances exist.

Each proposed CATEX was developed from existing CATEXs adopted by the Army, Navy, and Air Force (USAF), and other Federal agencies. The majority of MDA actions occur on Service (or host) installations or ranges. We have extensive experience using the respective Services' CATEXs for minor actions occurring on the host installation or range. The frequency of our actions and activities are not expected to increase from that of previous years as a result of the

MDA developing our own CATEXs. We also conducted an extensive review of other Federal agency CATEXs. Each proposed CATEX was reviewed and deliberated in concept, coverage, applicability and wording. We carefully crafted each CATEX with the goals of increasing administrative efficiency in NEPA compliance and avoiding misuse of the CATEXs that could lead to non-compliance with NEPA requirements. We determined the attached categorical exclusions met both objectives.

The Team considered the potential environmental impacts of the activities covered by these CATEXs and, based upon previous analyses and experience with these types of activities since the mid 1990's, determined these activities will not individually or cumulatively create a significant impact on the environment and do not require additional NEPA analysis and documentation unless extraordinary circumstances exist (40 C.F.R. § 1508.4). This determination is further supported by the MDA's analysis and conclusions documented in the *Ballistic Missile Defense System (BMDS) Programmatic Environmental Impact Statement (PEIS)*, 2007.

Once established, the MDA will satisfy NEPA when using these CATEXs by determining whether a proposed action falls entirely within one or more CATEXs' description of the activities and by reviewing the proposal to determine whether extraordinary circumstances exist. In the event extraordinary circumstances exist, an environmental assessment or an environmental impact statement will be prepared before proceeding with the proposed action.

The Team spent substantial time and effort deliberating over and drafting these CATEXs. We consulted with the Council on Environmental Quality (CEQ) to ensure the implementing procedures and all CATEXs conform to the requirements of NEPA. We took great care to ensure the CATEXs were supported by the administrative record.

A summary of information collected and relied upon by the Team in formulating and deciding the extent and limitations of the CATEXs is provided below. We envision this information will help interested parties understand the basis and rationale behind each CATEX. This information is not meant to provide an exhaustive list of factors relied upon during development of the CATEXs, but rather, to detail the basis upon which each CATEX was established.

Actions that are categorically excluded in the absence of unique circumstances are listed below.

## II. CATEX LIST

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- B-1. Normal personnel, fiscal or budgeting, and administrative activities and decisions including those involving military and civilian personnel (for example, recruiting, processing, paying, and record keeping).**
- B-2. Preparing, revising, or adopting regulations, instructions, directives, or guidance documents including those that implement without substantial change the regulations, instructions, directives, or guidance documents from higher headquarters or other Federal agencies.**
- B-3. Decreases, increases, relocation and realignment of personnel into existing Federally-owned or commercially-leased space that does not involve a substantial change affecting the supporting infrastructure or use of space (e.g., no increase in traffic beyond the capacity of the supporting network to accommodate such an increase).**
- B-4. Routine procurement of goods and services conducted in accordance with applicable procurement regulations, Executive orders (EO), and policies to support operations and infrastructure, including routine utility services and contracts.**
- B-5. Administrative study efforts involving no commitment of resources other than personnel and funding allocations. If any of these study efforts result in proposals for further action, those proposals must be considered separately by an appropriate CATEX or NEPA analysis. Examples include, but are not limited to: studies conducted to further administrative, personnel-related, architectural, engineering, safety, security, siting, and facility audit activities.**
- B-6. Studies, monitoring, data and sample collection, and information gathering that involve no permanent physical change to the environment. If any of these activities result in proposals for further action, those proposals must be considered by an appropriate CATEX or NEPA analysis. Examples include, but are not limited to:**
- a. Surveys for threatened and endangered species, wildlife and wildlife habitat, historic properties and archeological sites; wetland delineations; minimal water, air, waste; material and soil sampling (e.g., grab samples);**
  - b. Vulnerability, risk, and structural integrity assessments of infrastructure;**
  - c. Environmental Baseline Surveys or Environmental Condition of Property Surveys; and**
  - d. Topographical surveying and mapping that does not require cutting and/or removal of trees.**
- B-7. Sampling, well drilling and installation, analytical testing, site preparation and minimally intrusive physical testing. These activities could involve minor clearing, grubbing or movement of heavy equipment such as drill rigs. If any of these actions result in proposals for further actions, those proposals must be considered by an appropriate CATEX or NEPA analysis. Examples include, but are not limited to:**

- a. Sampling for asbestos containing materials (ACM), polychlorinated biphenyls (PCB), lead-based paint (LBP);
  - b. Topographical surveys and surveys for unexploded ordnance;
  - c. Minimally-intrusive geological, geophysical surveys, geo-technical activities, and seismic studies;
  - d. Minimally-intrusive sampling to determine if hazardous wastes, contaminants, pollutants, or special hazards are present; or
  - e. Ground-water monitoring wells, subsurface soil sampling and soil borings.
- (REC required.)

**B-8. Immediate responses to the release or discharge of oil or hazardous materials in accordance with an approved Spill Prevention, Control and Countermeasure (SPCC) Plan or Spill Contingency Plan, or that is otherwise consistent with the requirements of the EPA National Contingency Plan.**

**B-9. Temporary use of transportable power generators or operational support equipment when located in a previously disturbed area and when operated in compliance with applicable regulatory requirements.**

**B-10. Routine movement, handling, use and distribution of materials, including hazardous materials or wastes that are moved, handled, or distributed in accordance with applicable regulations, such as Resource Conservation and Recovery Act (RCRA), Occupational Safety and Health Administration (OSHA) and Hazardous Materials Transportation Act (HMTA).**

**B-11. Routine movement of mobile test assets (such as ships, aircraft, mobile sensors, telemetry, etc.) for routine missile defense test and evaluation, for repair, overhaul or maintenance, or for home port reassignments where no new support facilities are required.**

**B-12. Activities and operations to be conducted in an existing non-historic structure which are within the scope of and are compatible with the present functional use of the building, will not result in a substantial increase in waste discharged to the environment, will not result in substantially different waste discharges from current or previous activities, and emissions will remain within established permit limits, if any.**

**B-13. Acquisition, installation, modification, routine repair and replacement, and operation of utility (e.g., water, sewer, and electrical) and communication systems, mobile antennas, data processing cable, and similar electronic equipment that use existing rights-of-way, easements, distribution systems, facilities, or previously disturbed land. (REC required.)**

**B-14. Acquisition, installation or minor relocation, operation and maintenance or evaluation of physical security devices or controls to protect human or animal life and to enhance the physical security of existing critical assets in compliance with applicable**

**Federal, tribal, state and local requirements to protect the environment. Examples include, but are not limited to:**

- a. Motion detection systems;**
- b. Raptor electrocution prevention devices;**
- c. Lighting;**
- d. Remote video surveillance systems;**
- e. Access controls; and**
- f. Physical barriers, fences, grating, on or adjacent to existing facilities.**

**(REC required.)**

**B-15. Maintenance of archaeological, historical, and endangered or threatened species avoidance markers, fencing, and signs.**

**B-16. Road or trail construction and repair on existing rights-of-ways or in previously disturbed areas which do not result in a change in functional use. Runoff, erosion, and sedimentation controlled through implementation of best management practices (BMP). (REC required.)**

**B-17. Routine repair and maintenance of buildings, vessels, aircraft, grounds, and other facilities and equipment which do not result in a change in functional use or a significant impact on a historically significant element or setting. Examples include, but are not limited to: repair of roofs, doors, windows, or fixtures, localized pest management, and minor erosion control measures.**

**B-18. New construction or equipment installation or alterations (interior and exterior) to or construction of an addition to an existing structure that is similar to existing land use if the area to be disturbed has no more than 5.0 cumulative acres of new surface disturbance. The following conditions must be met:**

- a. The structure and proposed use are compatible with applicable Federal, tribal, state and local planning and zoning standards;**
- b. The site and scale of construction or improvement is consistent with those of existing, adjacent, or nearby buildings, and;**
- c. The construction or improvement will not result in uses that exceed existing support infrastructure capacities (roads, sewer, water, parking, etc.).**

**This does not include construction of facilities for the transportation, distribution, use, storage, treatment, and disposal of solid waste or hazardous waste. (REC required.)**

**B-19. Demolition of non-historic buildings, structures, or other improvements and repairs that result in disposal of debris there-from, or removal of a part thereof for disposal, in accordance with applicable regulations, including those regulations applying to removal of asbestos containing materials (ACM), polychlorinated biphenyls (PCBs), lead-based paint (LBP), and other special hazard items. (REC required.)**

**B-20. Research, testing, and operations conducted at existing facilities and plants or laboratories (including contractor-operated laboratories and plants) and in compliance with all applicable safety, environmental and natural conservation laws. Examples include, but are not limited to: wind tunnels, high energy lasers, remote sensing**

**instruments, vacuum chambers, high altitude simulator facilities, and propellant testing facilities.**

**B-21. Routine installation and use of radars, telemetry systems, communications equipment, and other essentially similar facilities and equipment within a launch facility, mobile platform, military installation, training area, or previously disturbed area that conform to current American National Standards Institute/Institute of Electrical and Electronics Engineers (ANSI/IEEE) guidelines for maximum permissible exposure to electromagnetic fields. (REC required.)**

### III. ADMINISTRATIVE RECORD FOR MDA CATEXS

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#### **B-1. Normal personnel, fiscal or budgeting, and administrative activities and decisions including those involving military and civilian personnel (for example, recruiting, processing, paying, and record keeping).**

The actions contemplated by this CATEX are a variety of administrative activities having no potential for significant environmental impacts. This CATEX is supported by long-standing practices and use of similar CATEXS by the Services and other Federal agencies. MDA found that actions of a similar nature, scope, and intensity were performed throughout the Federal government without significant environmental impacts. MDA has been conducting similar administrative type activities for over 20 years and they are conducted primarily in an office setting and would not impact the environment.

Based upon the extensive history of the application of similar CATEXS by the Services and other Federal agencies and the absence of extraordinary circumstances associated with their application, this CATEX is determined to be applicable to MDA projects. MDA, being a Department of Defense (DoD) component, conducts administrative, fiscal, and personnel activities in a similar manner as the Services.

#### **Comparable Agency Categorical Exclusions and Administrative Records**

##### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(b)(5) Normal personnel, fiscal, and administrative activities involving military and civilian personnel (recruiting, processing, paying, and records keeping).

##### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C, Categorical Exclusions*

(1) Routine fiscal and administrative activities, including administration of contracts.

(10) Routine personnel actions.

##### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.4. Normal personnel, fiscal or budgeting, and administrative activities and decisions including those involving military and civilian personnel (for example, recruiting, processing, paying, and records keeping).

## **U.S. Coast Guard**

**Reference:** *COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions*

(1) Routine personnel, fiscal, and administrative activities, actions, procedures, and policies which clearly do not have any environmental impacts, such as military and civilian personnel recruiting, processing, paying, and record keeping.

## **Federal Emergency Management Agency**

**Reference:** *44 CFR 10.8 (d) (2)*

(i) Administrative actions such as personnel actions, travel, procurement of supplies, etc., in support of normal day-to-day activities and disaster related activities

## **MDA Environmental Reviews**

**Reference:** *US AF Form 813 (AF 813) AF Permit to Missile Defense Agency for Use of Administrative Space at 10441 Kuter Avenue, May 2008. Qualifies for USAF CATEX A2.3.4.*

The proposed action was to initiate a real estate transaction to permit authorized use of approximately 6,000 square feet of space at 10441 Kuter Avenue at Elmendorf Air Force Base (AFB).

### **B-2. Preparing, revising, or adopting regulations, instructions, directives, or guidance documents including those that implement without substantial change the regulations, instructions, directives, or guidance documents from higher headquarters or other Federal agencies.**

The actions contemplated by this CATEX are a variety of administrative activities having no potential for significant environmental impacts. This CATEX is supported by long-standing practice and use of similar CATEXs by the Services and other Federal agencies. The Team found that actions of a similar nature, scope, and intensity were performed throughout the Federal government without significant environmental impacts. MDA has been conducting these administrative type activities for over 20 years. They are conducted primarily in an office setting and would not impact the environment.

Based upon the extensive history of the application of similar CATEXs by the Services and other Federal agencies and the absence of extraordinary circumstances associated with their application, this CATEX is determined to be applicable to MDA projects. MDA, being a DoD component, conducts regulations management and guidance document activities in a similar manner as the Services.

In addition, MDA recognized other Federal agencies, with very few limitations, must meet the same requirements to protect the environment. The Team determined the characteristics of the activities at MDA were no different from those performed by other Federal agencies.

## Comparable Agency Categorical Exclusions and Administrative Records

### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B Categorical Exclusions*

(b)(3) Preparation of regulations, procedures, manuals, and other guidance documents that implement, without substantive change, the applicable Headquarters Department of the Army or other federal agency regulations, procedures, manuals, and other guidance documents that have been environmentally evaluated (subject to previous NEPA review).

### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(5) Issuance or modification of administrative procedures, regulations, directives, manuals, or policy.

### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.5. Preparing, revising, or adopting regulations, instructions, directives, or guidance documents that do not, themselves, result in an action being taken.

A2.3.6. Preparing, revising, or adopting regulations, instructions, directives, or guidance documents that implement (without substantial change) the regulations, instructions, directives, or guidance documents from higher headquarters or other Federal agencies with superior subject matter jurisdiction.

### **U.S. Coast Guard**

**Reference:** *COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions*

(33) Preparation of guidance documents that implement, without substantive change, the applicable Commandant Instruction or other Federal agency regulations, procedures, manuals, and other guidance documents.

### **Federal Emergency Management Agency**

**Reference:** *44 CFR 10.8 (d) (2)*

(ii) Preparation, revision, and adoption of regulations, directives, manuals, and other guidance documents related to actions that qualify for categorical exclusions.

**B-3. Decreases, increases, relocation and realignment of personnel into existing Federally-owned or commercially-leased space that does not involve a substantial change affecting the supporting infrastructure or use of space (e.g., no increase in traffic beyond the capacity of the supporting network to accommodate such an increase).**

The Team found actions of a similar nature, scope and intensity throughout the Federal government without significant environmental impacts. Such actions include a variety of internal administrative activities, as well as activities involving the physical relocation of personnel and equipment. For example, MDA has significant experience increasing and decreasing personnel (some through the Base Realignment and Closure (BRAC) process) and routinely relocating personnel into several locations at host installations; the Huntsville, AL area; Colorado Springs, CO; Dahlgren, VA; and the National Capital Region (NCR). Environmental Assessments (EAs) and Environmental Impact Statements (EISs) were prepared for large relocations and realignments as described further below. These activities have not resulted in significant environmental impacts.

However, the Team was aware that physical relocations of personnel and equipment could involve a variety of associated activities, some of which could potentially impact the human environment. To clearly demonstrate those activities were beyond the scope of this CATEX, the Team included language limiting its scope to actions which would not result in exceeding the infrastructure capacity or changing the general use of space involved by that activity.

The Team cited the example of an increase in vehicular traffic beyond the capacity of the supporting road network to accommodate that increase. This example was intended to exemplify a reduction, realignment or relocation that would not be encompassed by this CATEX due to extraordinary circumstances that may result in the activity having significant environmental effects. The Team provided this example to ensure future users of this CATEX would be alerted to the potential for such indirect impacts when contemplating using this CATEX.

The Team also noted numerous other Federal agencies have CATEXs for similar activities that are sufficiently descriptive of the activity as to establish for the Team that those activities were similar in nature, scope, and impact on the human environment as those performed by MDA. In addition, the Team recognized all Federal agencies, with very few exceptions, must meet the same requirements to protect the environment. The Team determined the characteristics of MDA activities were no different from those performed by other Federal agencies. All Federal agencies routinely experience increases, decreases, relocation and realignment of personnel into existing Federally-owned or commercially leased space, and have done so for many years. The characteristics of the action, i.e., movement of Federal agency personnel into and out of existing office space and are accomplished in much the same manner throughout the Federal Government. The frequency of these actions at MDA is no greater than other DoD agencies, and are estimated to be less as a whole especially given the relatively small size of MDA. The context, standards, and protocols governing these movements are similar throughout Federal Government and the General Services Administration (GSA) is often involved. These activities have been occurring for many years and no individual or cumulative significant impacts on the

human environment have been reported. For the past 20 years, MDA has been using existing Military Service CATEXs for these activities and have found their use appropriate.

## **Comparable Agency Categorical Exclusions and Administrative Records**

### **U.S. Army**

**Reference:** *32CFR Part 651, Appendix B, Categorical Exclusions*

(b)(12) Reductions and realignments of civilian and/or military personnel that: fall below the thresholds for reportable actions as prescribed by statute (10 United State Code (U.S.C.) 2687) and do not involve related activities such as construction, renovation, or demolition activities that would otherwise require an EA or an EIS to implement (REC required). This includes reorganizations and reassignments with no changes in force structure, unit redesignations, and routine administrative reorganizations and consolidations (REC required).

(b)(14) Relocation of personnel into existing federally-owned (or state-owned in the case of Army National Guard) or commercially-leased space, which does not involve a substantial change in the supporting infrastructure (for example, an increase in vehicular traffic beyond the capacity of the supporting road network to accommodate such an increase is an example of substantial change) (REC required).

### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(39) Relocation of personnel into existing federally-owned or commercially leased space that does not involve a substantial change affecting the supporting infrastructure (e.g., no increase in vehicular traffic beyond the capacity of the supporting road network to accommodate such an increase).

### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.21. Routine personnel decreases and increases, including work force conversion to either on-base contractor operation or to military operation from contractor operation (excluding base closure and realignment actions which are subject to congressional reporting under 10 U.S.C. 2687).

### **U.S. Department of Homeland Security**

**Reference:** *Directive 023-01, Environmental Planning Program*

Reductions, realignments, or relocation of personnel that do not result in exceeding the infrastructure capacity or changing the use of space. An example of a substantial change in use of supporting infrastructure would be an increase in vehicular traffic beyond the capacity of the supporting road network to accommodate such an increase.

**Reference: *Environmental Assessment for Base Realignment and Closure, Installation Support, and Associated Future Master Planning Actions at Redstone Arsenal, Alabama, 2006, resulting in a Finding of No Significant Impact (FONSI)***

Note: This Army EA included MDA's movement of personnel from various locations to Huntsville, AL. MDA typically would not use a CATEX for this large of a relocation of personnel. However, the EA demonstrates that conducting activities contemplated in this CATEX of this magnitude did not result in a significant impact to the environment, thus these actions on a smaller level would not be expected to result in significant environmental impacts as long as no extraordinary circumstances exist.

This EA considered the environmental impacts involving BRAC-directed actions, including the construction of Phase III and IV of the Von Braun Complex for MDA and relocating MDA functions and personnel from leased facilities in Arlington, VA, Falls Church, VA, and Huntsville, AL to Redstone Arsenal. The Von Braun Complex would be expanded to provide administrative space and specialized computer laboratories. Approximately 3,500 personnel were expected to be relocated into Von Braun III and IV upon construction completion.

Thirteen environmental resource areas were evaluated and no potential impacts were classified as significant based on the significance criteria.

Von Braun IV is currently being constructed and is expected to be complete in FY 2016. A recent review of construction activities and relocation of personnel into Von Braun IV determined no additional analysis NEPA analysis was needed and no significant environmental impacts would occur.

**Missile Defense Agency Environmental Reviews**

**Reference: *Environmental Impact Statement for Implementation of 2005 Base Realignment and Closure (BRAC) Recommendations and Related Army Actions at Fort Belvoir, Virginia, 2007***

The Army proposed two actions concerning Fort Belvoir, VA: Revising the Fort Belvoir land use plan, and realigning units, agencies, and activities to Fort Belvoir. Construction and renovation of facilities would be required to accommodate the larger workforce (approximately 22,000). Six major entities would relocate to Fort Belvoir, including approximately 292 personnel from MDA, Headquarters Command Center. Construction and renovation of facilities to support additional personnel at Fort Belvoir would entail 20 separate facilities projects totaling about 6.2 million square feet of built space and about 7 million square feet of parking structures. One of those facilities would be for a MDA facility at 107,000 square feet on approximately 1.3 acres. MDA's small footprint compared to the overall project (107,000 square feet vs. 6.3 million square feet) would have a minimal impact to the environment. As would be expected from such a large project, adverse effects on the transportation system would be expected. However, proposed road improvements could mitigate the effects of the proposed action. All other impacts to the environment were expected to be minor.

**Reference: *Record of Categorical Exclusion (RCE) Re-engineering of Missile Defense Agency AEGIS Ballistic Missile Defense (Relocation of MDA personnel to Dahlgren, VA), March 2007. Qualifies for Navy CATEX (f) (39).***

The proposed action was to relocate approximately 340 MDA personnel from a leased building in Crystal City, Arlington, VA to a facility located at the Naval Support Facility Dahlgren, Dahlgren, VA.

**Reference: *REC Realignment of Elements/Personnel of the MDA from NCR to Fort Belvoir, VA, March 2012. Qualifies for Army CATEX (b)14.***

The proposed action was to move approximately 150 personnel from remaining off-base elements to a government facility in close proximity to MDA's Headquarters facility on Ft. Belvoir, VA. This action is expected to be completed by FY 2015.

**B-4. Routine procurement of goods and services conducted in accordance with applicable procurement regulations, Executive orders (EO), and policies to support operations and infrastructure, including routine utility services and contracts.**

Procurement of goods and services and awarding of contracts for technical support services and other services included in this CATEX involve administrative activities. Activities contemplated by this CATEX are a variety of administrative activities performed in a similar nature, scope and intensity throughout the Agency and Federal government without significant environmental impacts. These activities are routine, day-to-day operations of MDA and the U.S. Government in general. None of the activities have the potential for significant environmental impacts when conducted in compliance with applicable Federal, state and local requirements.

The CATEX requires the procurement of goods and services to be conducted in accordance with Federal Acquisition Regulations, EOs, and Office of the Under Secretary of Defense, Acquisition, Technology and Logistics (OUSD (AT&L)) Directives, which will insure these procurement activities meet policies and standards consistently applied across the U.S. Government, including the requirement to procure environmentally sustainable goods and services, when feasible.

Recognizing these are routine, day-to-day activities required for the normal operation of the U.S. Government, the extensive history of the Services' and other Federal agencies' application of this CATEX and the lack of extraordinary circumstances associated with its application, this CATEX is determined to be applicable to MDA. As a DoD component, MDA conducts procurement activities in the same manner as the rest of the Services. MDA follows the same strict procurement and acquisition regulations, EO and DoD Directives as the Services. MDA's procurement activities are dwarfed by the Military Services, which procure goods and services in much greater quantity and frequency than MDA. Furthermore, MDA has been using the existing Services' CATEXs for the past 20 plus years.

The Team noted numerous other Federal agencies have CATEXs for similar activities. MDA determined those activities were also similar in nature, scope and impact on the human environment to those performed by MDA. In addition, MDA recognized all Federal agencies, with very few exceptions, must meet the same requirements to protect the environment. The Team determined the characteristics of the activities at MDA were no different from those performed by other Federal agencies in general, as well as specifically related to the environment.

## **Comparable Agency Categorical Exclusions and Administrative Records**

### **U.S. Army**

**Reference:** *32CFR Part 651, Appendix B, Categorical Exclusions*

(e)(1) Routine procurement of goods and services (complying with applicable procedures for sustainable or “green” procurement) to support operations and infrastructure, including routine utility services and contracts.

(e)(6) Acquisition or contracting for spares and spare parts, consistent with the approved Technical Data Package.

### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(7) Routine procurement of goods and services conducted in accordance with applicable procurement regulations, executive orders, and policies.

(12) Routine procurement, management, storage, handling, installation, and disposal of commercial items, where the items are used and handled in accordance with applicable regulations (e.g. consumables, electronic components, computer equipment, pumps).

### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.1. Routine procurement of goods and services.

### **U.S. Coast Guard**

**Reference:** *COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions*

(2) Routine procurement activities and actions for goods and services, including office supplies, equipment, mobile assets, and utility services for routine administration, operation, and maintenance.

## **Federal Emergency Management Agency**

**Reference: 44 CFR 10.8 (d) (2)**

(vi) Procurement of goods and services for support of day-to-day and emergency operational activities, and the temporary storage of goods other than hazardous materials, so long as storage occurs on previously disturbed land or in existing facilities.

**B-5. Administrative study efforts involving no commitment of resources other than personnel and funding allocations. If any of these study efforts result in proposals for further action, those proposals must be considered separately by an appropriate CATEX or NEPA analysis. Examples include, but are not limited to: studies conducted to further administrative, personnel-related, architectural, engineering, safety, security, siting, and facility audit activities.**

The actions contemplated by this CATEX are a variety of administrative activities having no potential for significant environmental impacts. The Team found actions of a similar nature, scope and intensity were performed throughout the Agency and DoD without significant environmental impacts. MDA uses many of the same standard protocols and guidelines (i.e., DoD Directives, respective Service Instructions and Industry standards) for conducting these activities as the Services and they have had no significant environmental impacts. Insignificant impacts would include the minor resource use of paper, printer ink, and the small amount of energy required to produce study reports and transportation of personnel to and from study sites. An example of an action under this CATEX would be an environmental compliance audit, which requires a site visit, document review, and interviews with site personnel. No equipment is used and typically no sampling of environmental media occurs. MDA uses the same U.S. Corp of Engineers assessment protocols as most of the Military Services and Federal agencies. These assessments are conducted annually for MDA facilities and have no observed environmental impacts. They are part of normal environmental, health and safety compliance type activities at various locations around the country.

The Team determined the use of examples in this CATEX would be helpful to future users in clarifying the types of activities envisioned by the CATEX. In providing examples, MDA did not intend to limit the CATEX to those activities or to extend the CATEX to actions involving extraordinary circumstances which might result in significant environmental effects.

The Team recognized some of the activities contemplated by this CATEX could result in proposals for further action. To ensure these proposals would not promote activities with potential to significantly impact the quality of the human environment, the CATEX is specifically limited so if an activity results in a proposal, the new proposal's environmental impacts would be evaluated either by another MDA CATEX or NEPA analysis. This limitation is in place to ensure there will be no potential for significant environmental impacts contemplated by the application of this CATEX.

As documented in Table B-5.1, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable standard operating procedures (SOPs), timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;
- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, must meet substantially the same requirements to protect the environment and employ SOPs to ensure compliance;
- 4) Extraordinary circumstances associated with its application are absent; and
- 5) No known significant impacts are associated with this proposed activity.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusions and Administrative Records**

#### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(b)(8) Preparation of administrative or personnel-related studies, reports, or investigations.

#### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(4) Administrative studies, surveys and data collections.

#### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.24. Study efforts that involve no commitment of resources other than personnel and funding allocations.

#### **U.S. Coast Guard**

**Reference:** *COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions*

(31) Planning and technical studies which do not contain recommendations for authorization or funding for future construction, but may recommend further study. This includes engineering efforts or environmental studies undertaken to define the elements

of a proposal or alternatives sufficiently so that the environmental effects may be assessed and does not exclude consideration of environmental matters in the studies.

**Federal Emergency Management Agency**

**Reference: 44 CFR 10.8 (d) (2)**

(iii) Studies that involve no commitment of resources other than manpower and associated funding.

**Table B-5.1 Comparative Analysis of MDA CATEX B-5 to Other Agency CATEXs.**

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Navy</b>	<b>U.S. Air Force</b>	<b>U.S. Coast Guard</b>	<b>Federal Emergency Management Agency</b>	<b>Notes</b>
<b>Applicable CATEXs</b>	B-5	(b)(8)	(f)(4)	A2.3.24	(31)	44 CFR 10.8 (d) (2) (iii)	
<b>Characteristics of the Action</b>	<p>Administrative study efforts involving no commitment of resources other than personnel and funding allocations.</p> <p>These studies typically only require a site visit and/or a document review followed by an analysis and report preparation with conclusions or recommendations. For a site visit, surveys are typically of short duration not lasting more than a few days or a week at most.</p> <p>If any of these study efforts result in proposals for further action, those proposals must be subsequently analyzed. Examples include: Studies conducted in furtherance of administrative, personnel-related, architectural, engineering, safety, security, siting and facility audit activities.</p>	<p>Proposed action is limited to preparation of administrative or personnel-related studies, reports, or investigations.</p> <p>MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, U.S. Army Kwajalein Atoll (USAKA); White Sands Missile Range (WSMR), NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.</p>	<p>Proposed action is limited to administrative studies, surveys and data collections.</p> <p>MDA has extensive experience working at U.S. Navy installations such as Pacific Missile Range Facility, (PMRF), HI; Point Mugu Sea Range, CA; San Nicolas Island, CA; and Dahlgren Naval Base, VA.</p>	<p>Proposed action is limited to study efforts that involve no commitment of resources other than personnel and funding allocations.</p> <p>MDA has extensive experience working at U.S. Air Force Installations such as Vandenberg AFB, CA; Edwards AFB, CA; Wake Island; Clear Air Force Station (AFS), AK; Elmendorf AFB, AK; Eareckson AFS, AK; and Schriever AFB, CO.</p>	<p>Planning and technical studies which do not contain recommendations for authorization or funding for future construction, but may recommend further study. This includes engineering efforts or environmental studies undertaken to define the elements of a proposal or alternatives sufficiently so the environmental effects may be assessed and does not exclude consideration of environmental matters in the studies.</p>	<p>Proposed action is limited to studies that involve no commitment of resources other than manpower and associated funding.</p>	<p>These are essentially desk top or site inspection studies only with no significant impacts on the physical environment.</p>
<b>Methods of Implementing the Action</b>	<p>Work with host installation or property owner to identify applicable laws, regulations, management plans, SOPs, and existing areas with known natural and/or cultural resources and/or environmental contamination.</p> <p>Work with host installation or property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation to conduct any required coordination with Federal and state agencies.</p>	<p>Coordinate with installation staff to identify applicable laws, regulations, management plans, SOPs, and existing areas with known natural and/or cultural resources and/or environmental contamination.</p> <p>Coordinate with installation staff to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Conduct any required coordination with Federal and state agencies.</p>	Same	Same	<p>Coordinate with internal staff to identify applicable laws, regulations, management plans, SOPs, and existing areas with known natural and/or cultural resources and/or environmental contamination.</p> <p>Coordinate with internal staff to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Conduct any required coordination with Federal and state agencies.</p>	<p>Coordinate with internal staff and local public entity to identify applicable laws, regulations, management plans, SOPs, and existing areas with known natural and/or cultural resources and/or environmental contamination.</p> <p>Coordinate with internal staff and local public entity to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Conduct any required coordination with Federal and state agencies.</p>	
<b>Frequency of the Actions</b>	These studies occur frequently.	Same	Same	Same	Same	Same	
<b>Applicable Regulations</b>	NEPA, Endangered Species Act (ESA), National Historic Preservation Act (NHPA), Archaeological Resources Protection Act (ARPA), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Clean Water Act (CWA), Clean Air Act (CAA), and other applicable Federal and state Regulations, DoD and Military Service requirements, and industry standards.	Same	Same	Same	Same	Same	
<b>Applicable SOPs</b>	Installation/Manufacturer specific	Same	Same	Same	Same	Same	

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Navy</b>	<b>U.S. Air Force</b>	<b>U.S. Coast Guard</b>	<b>Federal Emergency Management Agency</b>	<b>Notes</b>
<b>Timing and Context</b>	Surveys could occur any time of the year. These are generally performed at a Host installation, although some studies could be performed at MDA-leased administrative or warehouse facilities located on commercial property.	Same	Same	Same	Same	Same	
<b>Extraordinary Circumstances</b>	Follow-on intrusive investigations and actions could be required, but would be analyzed in a subsequent analysis.	Same	Same	Same	Same	Same.	
<b>Known Impacts from Proposed Action</b>	After 20+ years of activity, MDA knows of no known significant impacts from these types of studies.	Same	Same	Same	Unknown (but expected to be similar)	Unknown (but expected to be similar)	

- B-6. Studies, monitoring, data and sample collection, and information gathering that involve no permanent physical change to the environment. If any of these activities result in proposals for further action, those proposals must be considered by an appropriate CATEX or NEPA analysis. Examples include, but are not limited to:**
- a. Surveys for threatened and endangered species, wildlife and wildlife habitat, historic properties and archeological sites; wetland delineations; minimal water, air, waste; material and soil sampling (e.g., grab samples);**
  - b. Vulnerability, risk, and structural integrity assessments of infrastructure;**
  - c. Environmental Baseline Surveys or Environmental Condition of Property Surveys; and**
  - d. Topographical surveying and mapping that does not require cutting and/or removal of trees.**

The Team determined the activities contemplated by this CATEX would have no potential for significant environmental impacts. Further, the Team found actions of a similar nature, scope and intensity were performed at MDA, the Services, and other Federal agencies by experienced subject matter experts (e.g., geologists, environmental scientists, biologists, archaeologists, environmental engineers, certified wetland scientist/delineators, security personnel, etc.) following very strict protocols, SOPs, and processes to ensure no significant environmental impacts occur. In addition, MDA closely coordinates all studies with the host installation/range environmental specialists to further ensure a minimal impact to resources occurs.

These activities are not intrusive to the environment, as they involve the analysis and assessment of the natural environment without fundamentally altering it. These activities are typically of short duration, taking only a few days to complete, and generally, are not conducted at the same location again. The exception to this would include follow-on investigations, which would require additional analysis to ensure they would be covered by an appropriate CATEX or additional NEPA analysis.

These activities are required by various Federal, state and DoD directives, laws and regulations and are thus part of normal day-to-day environmental compliance activities. For example, Military installations and all Federal facilities with federally designated endangered and threatened species must carry out programs for their conservation (50 C.F.R. 402.01(a), 402.10, 402.12). Specific requirements include completing surveys to determine if the facility has any threatened or endangered species, preparation of installation management plans for natural resources and cultural resources, consultations with the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and other agencies, and taking actions to comply with consultations/opinions received. By their nature these surveys tend to prevent and eliminate possible impacts, such as disturbance to threatened and endangered species and wildlife and its habitat, damage to historic properties and archeological sites, and alteration or loss of wetlands. In addition, these activities have been conducted by MDA for over 20 plus years in a wide range of environments ranging from tropical forests to ocean areas to desert to Arctic tundra without observing any significant adverse impacts.

The Team determined the use of examples would help clarify the types of activities envisioned by this CATEX. In providing examples, MDA did not intend to limit the CATEX to these

activities or to extend the CATEX to actions including extraordinary circumstances resulting in an activity having significant environmental effects.

The Team recognized some of the activities contemplated by this CATEX could result in proposals for further action. To ensure these proposals would not promote activities with the potential to significantly impact the quality of the human environment, if the study or activity results in a proposal, it must be supported by another MDA CATEX or NEPA analysis. This limitation is in place to ensure there will be no potential for significant environmental impacts contemplated by the application of this CATEX.

As documented in Table B-6.1, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;
- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;
- 4) Extraordinary circumstances associated with its application are absent; and
- 5) No known significant impacts are associated with this proposed activity.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusions and Administrative Records**

#### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(d) (4) Studies, data collection, monitoring and information gathering that do not involve major surface disturbance. Examples include topographic surveys, bird counts, wetland mapping, and other resources inventories (REC required).

#### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(18) Studies, data, and information gathering that involve no permanent physical change to the environment (e.g., topographic surveys, wetlands mapping, surveys for evaluating environmental damage, and engineering efforts to support environmental analyses).

**U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.25. The analysis and assessment of the natural environment without altering it (inspections, audits, surveys, investigations). This CATEX includes the granting of any permits necessary for such surveys, provided that the technology or procedure involved is well understood and there are no adverse environmental impacts anticipated from it. The Environmental Planning Function (EPF) must document application of this CATEX on AF Form 813.

**U.S. Coast Guard**

**Reference:** *COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions*

(26) Data gathering, information gathering, and studies that involve no physical change to the environment. Examples include topographic surveys, bird counts, wetland mapping, and other inventories.

**Federal Emergency Management Agency**

**Reference:** *44 CFR § 10.8 (d) (2)*

(iii) Studies that involve no commitment of resources other than manpower and associated funding.

(xviii) The following planning and administrative activities in support of emergency and disaster response and recovery: (D) Situation Assessment including ground and aerial reconnaissance; (E) Information and data gathering and reporting efforts in support of emergency and disaster response and recovery and hazard mitigation

**Department of the Interior**

**Reference:** *Departmental Manual 516, Part 2, Appendix 1 Departmental Categorical Exclusions*

1.6 Nondestructive data collection, inventory (including field, aerial, and satellite surveying and mapping), study, research, and monitoring activities.

**Department of the Interior, U.S. Geological Survey**

**Reference:** *Departmental Manual 516, Part 9. 9.5 Categorical Exclusions*

A. Topographic, land use and land cover, geological, mineralogic, resources evaluation, and hydrologic mapping activities, including aerial topographic surveying, photography, and geophysical surveying.

D. Well logging, aquifer response testing, digital modeling, inventory of existing wells and water supplies, water-sample collection.

E. Operation, construction and installation of: (a) Water-level or water quality recording devices in wells; (b) pumps in wells; (c) surface-water flow measuring equipment such as weirs and stream-gaging [sic] stations, and (d) telemetry systems, including contracts therefor [sic].

F. Routine exploratory or observation groundwater well drilling operations which do not require a special access road, and which use portable tanks to recycle and remove drilling mud, and create no significant surface disturbance.

G. Test or exploration drilling and down-hole testing, including contracts therefore.

H. Establishment of survey marks, placement and operation of field instruments, and installation of any research/monitoring devices.

I. Digging of exploratory trenches requiring less than 20 cubic yards of excavation.

**Department of the Interior, Bureau of Land Management**

**Reference:** *Departmental Manual 516, Part 11. 11.5 Categorical Exclusions*

F. Solid Minerals.

(9) Digging of exploratory trenches for mineral materials, except in riparian areas.

H. Other.

(3) Conducting preliminary hazardous materials assessments and site investigations, site characterization studies and environmental monitoring. Included are siting, construction, installation and/or operation of small monitoring devices such as wells, particulate dust counters and automatic air or water samples.

**MDA Environmental Reviews**

**Reference:** *REC Geophysical Survey in Kuluk Bay at Adak, Alaska, March 2004.*

**Qualifies for Army CATEX (d)4.**

The proposed action was to perform a geophysical survey of Kuluk Bay at Adak, AK. The survey would include: 1) mapping the water depth and features on the seafloor; 2) mapping the thickness of unconsolidated sediment on the seafloor; 3) obtain sediment samples; and 4) make in-situ measurements of consolidation characteristic of sediment.

**Table B-6.1 Comparative Analysis of MDA CATEX B-6 to Other Agency CATEXs.**

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Navy</b>	<b>U.S. Air Force</b>	<b>U.S. Coast Guard</b>	<b>Notes</b>
<b>Applicable CATEXs</b>	B-6	(d)(4)	(f)(18)	A2.3.25	(26)	
<b>Characteristics of the Action</b>	<p>Studies, monitoring, data and sample collection, and information gathering that involve no permanent physical change to the environment. If any of these activities result in proposals for further action, those proposals must be subsequently analyzed.</p> <p>These activities are not intrusive or only minimally so. Most activities consist of site inspections, existing document collection, and interviews with installation or regulatory agency personnel.</p> <p>Activities are typically of short duration not lasting more than a few days or a week at most.</p>	<p>Proposed action is limited to studies, data collection, monitoring and information gathering that do not involve major surface disturbance. Examples include topographic surveys, bird counts, wetland mapping, and other resources inventories (REC required).</p> <p>MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, USAKA; WSMR, NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.</p>	<p>Proposed action is limited to studies, data, and information gathering that involve no permanent physical change to the environment (e.g., topographic surveys, wetlands mapping, surveys for evaluating environmental damage, and engineering efforts to support environmental analyses).</p> <p>MDA has extensive experience working at U.S. Navy installations such as PMRF, HI; Point Mugu Sea Range, CA; San Nicolas Island, CA; and Dahlgren Naval Base, VA.</p>	<p>Proposed action is limited to the analysis and assessment of the natural environment without altering it (inspections, audits, surveys, investigations). This CATEX includes the granting of any permits necessary for such surveys, provided the technology or procedure involved is well understood and there are no adverse environmental impacts anticipated from it. The EPF must document application of this CATEX on AF Form 813.</p> <p>MDA has extensive experience working at U.S. Air Force Installations such as Vandenberg AFB, CA; Edwards AFB, CA; Wake Island; Clear AFS, AK; Elmendorf AFB, AK; Eareckson AFS, AK; and Schriever AFB, CO.</p>	<p>Proposed action is limited to data gathering, information gathering, and studies that involve no physical change to the environment. Examples include topographic surveys, bird counts, wetland mapping, and other inventories.</p>	<p>Limited time, intensity and frequency reduce the potential effects of the proposed action.</p>
<b>Methods of Implementing the Action</b>	<p>Work with host installation or property owner to identify applicable laws, regulations, management plans, SOPs, and existing areas with known natural and/or cultural resources and/or environmental contamination.</p> <p>Work with host installation or property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation to conduct any required coordination with Federal and state agencies.</p> <p>Activities would be conducted by qualified professionals (geologists, environmental scientists, biologists, archaeologists, environmental engineers, certified wetland scientist/delineators, surveyors and security personnel).</p>	<p>Coordinate with installation staff to identify applicable laws, regulations, management plans, SOPs, and existing areas with known natural and/or cultural resources and/or environmental contamination.</p> <p>Coordinate with installation staff to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Conduct any required coordination with Federal and state agencies.</p> <p>Activities would be conducted by qualified professionals (geologists, environmental scientists, biologists, archaeologists, environmental engineers, certified wetland scientist/delineators, surveyors and security personnel).</p>	<p>Same</p>	<p>Same</p>	<p>Coordinate with internal staff to identify applicable laws, regulations, management plans, SOPs, and existing areas with known natural and/or cultural resources and/or environmental contamination.</p> <p>Coordinate with internal staff to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Conduct any required coordination with Federal and state agencies.</p> <p>Activities would be conducted by qualified professionals (geologists, environmental scientists, biologists, archaeologists, environmental engineers, certified wetland scientist/delineators, surveyors and security personnel).</p>	<p>All these activities are conducted according to defined protocols that are fundamentally consistent across Federal agencies and by certified or otherwise qualified professionals.</p>
<b>Frequency of the Actions</b>	<p>Generally one time in one area. However, in the case of cultural or threatened and endangered species surveys, multiple surveys may be necessary.</p>	<p>Same</p>	<p>Same</p>	<p>Same</p>	<p>Same</p>	<p>Range operations are subject to conditions of installation's regulatory permits, cultural resource and natural resource management plans, and environmental restoration program.</p>
<b>Applicable Regulations</b>	<p>NEPA, ESA, NHPA, ARPA, CERCLA, CWA, CAA, and other applicable Federal and state regulations, DoD and Military Services requirements, and industry standards.</p>	<p>Same</p>	<p>Same</p>	<p>Same</p>	<p>Same</p>	

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Navy</b>	<b>U.S. Air Force</b>	<b>U.S. Coast Guard</b>	<b>Notes</b>
<b>Applicable SOPs</b>	Installation/Manufacturer specific	Same	Same	Same	Same	
<b>Timing and Context</b>	Surveys could occur any time of the year. Some biological surveys may be only conducted during growing season or when species are present, if migratory.	Same	Same	Same	Same	
<b>Extraordinary Circumstances</b>	If follow-on intrusive investigations and actions are required, they would be covered by another appropriate CATEX or NEPA analysis.	Same	Same	Same	Same	
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these types of surveys.	Same	Same	Same	Unknown (but expected to be similar)	

- B-7. Sampling, well drilling and installation, analytical testing, site preparation and minimally intrusive physical testing. These activities could involve minor clearing and grubbing or movement of heavy equipment such as drill rigs. If any of these actions result in proposals for further actions, those proposals must be considered by an appropriate CATEX or NEPA analysis. Examples include, but are not limited to:**
- a. Sampling for asbestos containing materials (ACM), polychlorinated biphenyls (PCB), lead-based paint (LBP);**
  - b. Topographical surveys and surveys for unexploded ordnance;**
  - c. Minimally-intrusive geological, geophysical surveys, and geo-technical activities, seismic studies;**
  - d. Minimally-intrusive sampling to determine if hazardous wastes, contaminants, pollutants, or special hazards are present; or**
  - e. Ground-water monitoring wells, subsurface soil sampling and soil borings.**
- (REC required.)**

MDA determined the activities contemplated by this CATEX have no potential for significant environmental impacts. As long as there were no extraordinary circumstances (e.g., presence of endangered or threatened species, presence of cultural resources, etc.), activities commonly undertaken when conducting a site survey prior to selecting a parcel for constructing a facility (e.g., surveying, determining depth to ground water, identifying soil characteristics, establishing baseline site conditions, etc.) do not have the potential to significantly impact the environment because they do not affect or change the environment.

To ensure extraordinary circumstances are not present and that only those actions having negligible impacts on the human environment are contemplated, the Team proposed a REC be prepared to document no extraordinary circumstances exist and all CATEX use criteria are met, or whether the action requires further analysis through the NEPA process.

The Team determined the use of examples would help clarify the types of activities envisioned by this CATEX and those of CATEX B-6. In providing examples, MDA did not intend to limit the CATEX to those activities or to extend the CATEX to actions including extraordinary circumstances resulting in the activity having significant environmental effects.

MDA recognized some of the activities contemplated by this CATEX could result in proposals for further action. To ensure these proposals would not promote activities with potential to significantly impact the quality of the human environment, if the activities described in this CATEX results in a proposal, the proposal must be supported by another MDA CATEX or NEPA analysis. This limitation is in place to ensure there will be no potential for significant environmental impacts contemplated by the application of this CATEX.

As predicted by MDA in an EA prepared to assess the potential impacts posed by MDA's proposal to conduct a geotechnical investigation and a topographic survey of a 60-acre site, no significant environmental impacts were identified or observed during the EA analysis or by USAF environmental management professionals following completion of the project.

Further, based upon the extensive history of the Services' and other Federal agencies' application of this CATEX and the lack of extraordinary circumstances associated with its application, the Team determined that this CATEX to conduct sampling, surveying, well drilling and installation, analytical testing, site preparation, and intrusive testing to determine if hazardous wastes, contaminants, pollutants, or special hazards are present is similarly used by the Military Services and other Federal agencies.

The same industry standards, protocols and guidelines are used by MDA and the Services. These activities are conducted because they are required by Federal and state regulations or Service directives and because they are necessary to protect human health and the environment. These activities are conducted by only qualified or certified professionals and are conducted in essentially the same manner throughout the Federal Government. Federal and state requirements dictate the manner in which they must be performed. Furthermore, possible negative impacts have been recognized by the regulators and procedures have been developed to prevent negative impacts. For example, to prevent contamination or cross-contamination of groundwater aquifers, there are requirements that all equipment that may encounter contaminated formation materials must be decontaminated prior to drilling each new borehole, and sampling equipment must be decontaminated between sampling intervals. Decontamination fluids must be captured, containerized, and properly disposed according to recommended procedures and regulations.

The Services, which are hosts at locations where MDA conducts the majority of its activities, conduct similar activities to those conducted by MDA on a much larger scale than MDA, and have CATEXs encompassing the types of activities contemplated for this MDA CATEX. In addition, MDA recognized all Federal agencies, with very few exceptions, must meet the same requirements to protect the environment.

As documented in Table B-7.1, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;
- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;
- 4) Extraordinary circumstances associated with its application are absent and documented by a REC; and
- 5) No known significant impacts are associated with this proposed activity, beyond those resulting from accidental fuel spills during fueling activities, which are unplanned actions. Potential impacts are mitigated using spill containment equipment and SOPs.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

## **Comparable Agency Categorical Exclusions and Administrative Records**

### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(h) (3) Sampling, surveying, well drilling and installation, analytical testing, site preparation, and intrusive testing to determine if hazardous wastes, contaminants, pollutants, or special hazards (for example, asbestos, PCBs, lead-based paint, or unexploded ordnance) are present (REC required).

### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.26. Undertaking specific investigatory activities to support remedial action activities for purposes of cleanup of Environmental Restoration Account - Air Force and RCRA corrective action sites. These activities include soil borings and sampling, installation, and operation of test or monitoring wells. This CATEX applies to studies that assist in determining final cleanup actions when they are conducted in accordance with legal agreements, administrative orders, or work plans previously agreed to by Environmental Protection Agency (EPA) or state regulators.

### **Department of the Interior, U.S. Geological Survey**

**Reference:** *Departmental Manual 516, Part 9, 9.5 Categorical Exclusions.*

A. Topographic, land use and land cover, geological, mineralogic, resources evaluation, and hydrologic mapping activities, including aerial topographic surveying, photography, and geophysical surveying.

D. Well logging, aquifer response testing, digital modeling, inventory of existing wells and water supplies, water-sample collection.

E. Operation, construction and installation of: (a) Water-level or water quality recording devices in wells; (b) pumps in wells; (c) surface-water flow measuring equipment such as weirs and stream-gauging stations, and (d) telemetry systems, including contracts therefore.

F. Routine exploratory or observation groundwater well drilling operations which do not require a special access road, and which use portable tanks to recycle and remove drilling mud, and create no significant surface disturbance.

G. Test or exploration drilling and down-hole testing, including contracts therefore.

H. Establishment of survey marks, placement and operation of field instruments, and installation of any research/monitoring devices.

I. Digging of exploratory trenches requiring less than 20 cubic yards of excavation.

**Department of the Interior, Bureau of Land Management**

**Reference:** *Departmental Manual 516, Part 11. 11.5 Categorical Exclusions*

F. Solid Minerals. (9) Digging of exploratory trenches for mineral materials, except in riparian areas.

H. Other. (3) Conducting preliminary hazardous materials assessments and site investigations, site characterization studies and environmental monitoring. Included are siting, construction, installation and/or operation of small monitoring devices such as wells, particulate dust counters and automatic air or water samples.

**Department of the Interior, Bureau of Reclamation**

**Reference:** *Departmental Manual 516, Part 14. 14.5 Categorical Exclusions*

(3) Data collection studies that involve test excavations for cultural resources investigations or test pitting, drilling, or seismic investigations for geologic exploration purposes where the impacts will be localized.

**Missile Defense Agency Environmental Reviews**

**Reference:** *National Missile Defense Geotechnical Investigation and Topographic Survey at Clear Air Station, Alaska Environmental Assessment, December 1999, resulting in FONSI*

Note: Only one MDA NEPA document was found that incorporates discussion of the type of activities included in the proposed MDA CATEX. This is because such activities are conducted routinely with minimal environmental impacts and are rarely analyzed in an EA and resulting FONSI.

The Proposed Action was to conduct a topographic survey to determine the elevations of the land and a geotechnical investigation to determine soil and rock conditions at the site. Activities included all clearing necessary to do the topographic survey and geotechnical work and any new access roads necessary to conduct geotechnical borings.

Design of the Ground-based Interceptor (GBI) facilities requires ground topographic mapping with 1-foot contour intervals. To achieve this resolution, survey lines would be cleared for a required hand survey with laser equipment and control markers. These lines would be hand cut by machete and chainsaw just wide enough to allow for the survey to proceed, typically 2 to 3 feet. Approximately 60 5,000-foot survey lines would be required.

Some clearing of brush and vegetation would be required before the actual geotechnical investigation to enable access, staging of drilling supplies, equipment set-up, and operation. Clearing of trails for the geotechnical equipment would affect approximately 60 acres. There would be approximately 150 borings.

A total of 10 percolation tests would be conducted in accordance with EPA approved procedures. Ground penetrating radar (GPR) survey would be conducted along the proposed alignment of the GBI silos in areas cleared as part of the access trails to assist in interpreting the depth and extent of the permafrost.

Analysis of potential environmental impacts of the Proposed Action concluded that no significant impacts to Clear AFS would occur. No significant environmental impacts were reported or observed during these activities at Clear AFS or after their completion.

**Table B-7.1 Comparative Analysis of MDA CATEX B-7 to Other Agency CATEXs.**

Benchmarking Categories	MDA	U.S. Army	U.S. Air Force	U.S. Dept. of the Interior, U.S. Geological Survey	U.S. Department of the Interior, Bureau of Land Management	Notes
Applicable CATEXs	B-7	(h)(3)	A2.3.26	Departmental Manual 516, Part 9, 9.5	Departmental Manual 516, Part 11. 11.5	
Characteristics of the Action	<p>Sampling, well drilling and installation, analytical testing, site preparation, and minimally intrusive physical testing. These activities could involve minor clearing and grubbing, or movement of heavy equipment such as drill rigs and do not permanently change the environment.</p> <p>Installation and operation of equipment is confined to host installation (or in extremely limited instances, private property where similar actions are permitted).</p> <p>Activities are typically of short duration not lasting more than a few days or a week at most and rarely repeated at the same location.</p>	<p>(h) (3) Proposed action is limited to sampling, surveying, well drilling and installation, analytical testing, site preparation, and intrusive testing to determine if hazardous wastes, contaminants, pollutants, or special hazards (for example, asbestos, PCBs, lead-based paint, or unexploded ordnance) are present (REC required)</p> <p>MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, USAKA; WSMR, NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.</p>	<p>Proposed action is limited to undertaking specific investigatory activities to support remedial action activities for purposes of cleanup of Environmental Restoration Account (ERA) - Air Force and RCRA corrective action sites. These activities include soil borings and sampling, installation, and operation of test or monitoring wells. This CATEX applies to studies that assist in determining final cleanup actions when they are conducted in accordance with legal agreements, administrative orders, or work plans previously agreed to by EPA or state regulators.</p> <p>MDA has extensive experience working at U.S. Air Force Installations such as Vandenberg AFB, CA; Edwards AFB, CA; Wake Island; Clear AFS, AK; Elmendorf AFB, AK; Eareckson AFS, AK; and Schriever AFB, CO.</p>	<p>A. Topographic, land use and land cover, geological, mineralogic, resources evaluation, and hydrologic mapping activities, including aerial topographic surveying, photography, and geophysical surveying.</p> <p>D. Well logging, aquifer response testing, digital modeling, inventory of existing wells and water supplies, water-sample collection.</p> <p>E. Operation, construction and installation of: (a) Water-level or water quality recording devices in wells; (b) pumps in wells; (c) surface-water flow measuring equipment such as weirs and stream-gauging stations, and (d) telemetry systems, including contracts therefore.</p> <p>F. Routine exploratory or observation groundwater well drilling operations which do not require a special access road, and which use portable tanks to recycle and remove drilling mud, and create no significant surface disturbance.</p> <p>G. Test or exploration drilling and downhole testing, including contracts therefore.</p> <p>H Establishment of survey marks, placement and operation of field instruments, and installation of any research/monitoring devices.</p> <p>I. Digging of exploratory trenches requiring less than 20 cubic yards of excavation</p>	<p>F. Solid Minerals. (9) Digging of exploratory trenches for mineral materials, except in riparian areas.</p> <p>H. Other. (3) Conducting preliminary hazardous materials assessments and site investigations, site characterization studies and environmental monitoring. Included are siting, construction, installation and/or operation of small monitoring devices such as wells, particulate dust counters and automatic air or water samples.</p>	<p>Temporary nature of activity limits the potential effects of the proposed action.</p> <p>Limited clearing and grubbing, and movement of heavy equipment minimizes potential impacts from activities.</p> <p>Applying operating conditions per federal, state and installation requirements minimizes potential impacts.</p>
Methods of Implementing the Action	<p>Work with host installation or property owner to identify applicable laws, regulations, management plans, SOPs, and existing areas with known natural and/or cultural resources and/or environmental contamination.</p> <p>Work with host installation or property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation to conduct any required coordination with Federal and state agencies.</p>	<p>Coordinate with installation staff to identify applicable laws, regulations, management plans, SOPs, and existing areas with known natural and/or cultural resources and/or environmental contamination.</p> <p>Coordinate with installation staff to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Conduct any required coordination with Federal and state agencies.</p> <p>Remove equipment, drilling wastes, investigation of derived wastes, close wells, and restore site to original condition (or</p>	Same	Similar	Similar	

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Air Force</b>	<b>U.S. Dept. of the Interior, U.S. Geological Survey</b>	<b>U.S. Department of the Interior, Bureau of Land Management</b>	<b>Notes</b>
	Remove equipment, drilling wastes, investigation of derived wastes, close wells, and restore site to original condition (or agreed upon condition – e.g., leaving behind gravel roads, storm water controls, or survey monuments.)	agreed upon condition – e.g., leaving behind gravel roads, storm water controls, or survey monuments.)				
<b>Frequency of the Actions</b>	Generally one time.	Same	Same	Same	Same	
<b>Applicable Regulations</b>	NEPA, ESA, RCRA, CERCLA, CWA, CAA, and other applicable Federal and state regulations, DoD and Military Service requirements, and industry standards.	Same plus USAKA Environmental Standards (UES)	Same	Same	Same	
<b>Applicable SOPs</b>	U.S. EPA Test Methods and installation plans and operating procedures.	Same	Same	Same	Same	
<b>Timing and Context</b>	Activities could occur any time of the year. These activities occur within the context of installation environmental management programs.	Same	Same	Same	Same	
<b>Extraordinary Circumstances</b>	Presence of endangered or threatened species, cultural/historic resources, contaminated media or aquifers, or hazardous materials/wastes.	Same	Same	Same	Same	
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these activities. Potential impacts are mitigated using established protocols and procedures. Contaminated media is removed and treated in accordance with (IAW) applicable regulations.	Same	Same	Unknown (but expected to be similar)	Unknown (but expected to be similar)	

**B-8. Immediate responses to the release or discharge of oil or hazardous materials in accordance with an approved Spill Prevention, Control and Countermeasure (SPCC) Plan or Spill Contingency Plan, or that is otherwise consistent with the requirements of the EPA National Contingency Plan.**

This CATEX is specifically limited to MDA actions conducted in a manner consistent with previously established and approved SPCC Plan or Spill Contingency Plan procedures and in compliance with Federal, state, and local requirements to protect the environment, and actions conducted in a manner that will result in no, or *de minimis*, change in the use of the facility or site. These plans are required by Federal and state regulations to address the prevention of accidental discharges of oil and hazardous substances and to control them when they do occur so as to minimize their impact on the environment. These plans describe and stipulate actions that must be taken to prevent spills or releases of oil or hazardous materials from occurring (i.e., types of storage containers, type and size of secondary containment, spill and over fill prevention controls, maintenance/inspection schedules, etc.). These plans further outline immediate actions to be taken in response to a release or discharge of hazardous materials. The intent of this CATEX is to include those actions that must be taken immediately to minimize the impacts of a spill to the environment. Minor releases do not pose a danger to personnel, property, and/or the environment and can be safely and competently controlled, contained, and cleaned up by site personnel. Immediate responses could include, but are not limited to, stopping the product flow and shutting off all ignition sources, followed by containment, control, and mitigation of the discharge. Mitigation could involve contaminated media being removed and treated IAW applicable regulations

An example of the type of activities that might require an immediate response to a release or spill would be when MDA operates emergency back-up generators for many of their mission critical assets. These generators run on either natural gas or diesel fuel, which is stored in steel-lined tanks (or rubber fuel bladders at deployed sites) with secondary containment. In the unlikely event a spill or discharge occurred from any of these diesel fuel tanks, the diesel fuel would be contained within the secondary containment structure and impacts to the environment would be minor or non-existent. However, if the spill were not contained within the secondary containment, MDA would follow the host installation/range's SPCC Plan for immediate response and containment, and would coordinate with appropriate emergency response personnel to ensure no significant impacts to the environment or human health would occur during clean-up. For those rare occasions that MDA would site these types of assets on commercial or industrial property, MDA would ensure a SPCC Plan has been developed in accordance with EPA guidelines.

As documented in Table B-8.1, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;

- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;
- 4) Extraordinary circumstances associated with its application are absent; and
- 5) No known significant impacts are associated with this proposed activity.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusions and Administrative Records**

#### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(h)(2) Immediate responses in accordance with emergency response plans (for example, Spill Prevention Control and Countermeasure Plan (SPCCP)/Installation Spill Contingency Plan (ISCP), and Chemical Accident and Incident Response Plan) for release or discharge of oil or hazardous materials/substances; or emergency actions taken by Explosive Ordnance Demolition (EOD) detachment or Technical Escort Unit.

#### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.30. Immediate responses to the release or discharge of oil or hazardous materials in accordance with an approved Spill Prevention and Response Plan or Spill Contingency Plan or that are otherwise consistent with the requirements of the National Contingency Plan.

#### **Defense Logistics Agency**

**Reference:** *Defense Logistics Agency Technical Support Document, Categorical Exclusions Evaluations*

(24) Immediate responses to the release or discharge of oil or hazardous materials in accordance with an approved Spill Prevention and Response Plan or Spill Contingency Plan or that are otherwise consistent with the requirements of the National Contingency Plan. (Defense Logistics Agency (DLA) Form 1664 required).

**Table B-8.1 Comparative Analysis of MDA CATEX B-8 to Other Agency CATEXs.**

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Air Force</b>	<b>Defense Logistics Agency</b>	<b>Notes</b>
<b>Applicable CATEXs</b>	B-8	(h)(2)	A2.3.30	Defense Logistics Agency Technical Support Document, Categorical Exclusions Evaluations	
<b>Characteristics of the Action</b>	<p>Immediate responses to the release or discharge of small amounts of oil or hazardous materials in accordance with an approved Spill Prevention and Response Plan or Spill Contingency Plan, or that are otherwise consistent with the requirements of the National Contingency Plan.</p> <p>Emergency generators powered by diesel fuel are generally installed and operated on host installations or leased property and all have secondary containment. Spills and releases are infrequent and generally occur during material transfer operations.</p> <p>Response actions are only conducted during emergency situations so as to prevent harm to the environment. The response may include such actions as application of absorbent materials, fire-fighting foams, temporary boom or dikes, or pumping and collection of liquids. In serious cases, evacuations of nearby personnel or offices could be required.</p>	<p>Proposed action is limited to immediate responses in accordance with emergency response plans (for example, SPCC Plan/Installation Spill Contingency Plan, and Chemical Accident and Incident Response Plan for release or discharge of oil or hazardous materials/substances; or emergency actions taken by EOD detachment or Technical Escort Unit.</p> <p>MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, USAKA; WSMR, NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.</p>	<p>Proposed action is limited to the immediate responses to the release or discharge of oil or hazardous materials in accordance with an approved Spill Prevention and Response Plan or Spill Contingency Plan or that are otherwise consistent with the requirements of the National Contingency Plan.</p> <p>MDA has extensive experience working at U.S. Air Force Installations such as Vandenberg AFB, CA; Edwards AFB, CA; Wake Island; Clear AFS, AK; Elmendorf AFB, AK; Eareckson AFS, AK; and Schriever AFB, CO.</p>	<p>Immediate responses to the release or discharge of oil or hazardous materials in accordance with an approved Spill Prevention and Response Plan or Spill Contingency Plan or that are otherwise consistent with the requirements of the National Contingency Plan. (DLA Form 1664 required)</p>	<p>Immediate actions are required to prevent adverse, and in some cases potentially catastrophic impacts.</p> <p>Detailed response procedures contained in spill response plans minimize potential impacts from response actions.</p> <p>Impacts of these types of responses are well-documented, and are almost always positive in the sense of preventing or minimizing an uncontrolled release of oil or a hazardous substance to the environment.</p> <p>There is 30+ years of experience with these procedures throughout Federal agencies and the private sector.</p>
<b>Methods of Implementing the Action</b>	<p>Work with host installation or property owner to prevent and control accidental discharges/releases and to ensure MDA activities are included in appropriate SPCC Plans.</p> <p>Work with host installation or property owner to identify applicable laws, regulations, and SOPs.</p> <p>Work with host installation or property owner to make sure required spill containment and response equipment is in place and functioning properly.</p> <p>Work with host installation or property owner to report incidents to appropriate regulatory authorities.</p> <p>Remove response equipment and dispose of all waste materials in compliance with Federal, state, DoD, and Service requirements.</p>	<p>Installation staffs to ensure all operations prevent and control accidental discharges/releases and ensure all activities are included in installation SPCC Plans.</p> <p>Installation staff identifies applicable laws, regulations, and SOPs.</p> <p>Installation staffs make sure required spill containment and response equipment are in place and functioning properly for Army operations and ensure tenants do the same.</p> <p>Remove response equipment and dispose of all waste materials in compliance with Federal, state, DoD, and Service requirements.</p>	Same	Similar	Implementation of emergency response procedures at a host installation, test ranges and private property is an infrequent, but well planned and documented activity, which conforms to the appropriate spill response plans.
<b>Frequency of the Actions</b>	Infrequent (in almost all cases).	Same	Same	Similar	
<b>Applicable Regulations</b>	NEPA, RCRA, CERCLA, CWA, Federal and state regulations and guidance documents	Same, plus UES	Same	Similar	
<b>Applicable SOPs</b>	Detailed procedures incorporated in the plans themselves.	Same	Same	Similar	
<b>Timing and Context</b>	Activities could occur any time of the year without warning. These activities usually occur within the context of installation environmental management programs or spill response plans.	Same	Same	Similar	
<b>Extraordinary Circumstances</b>	A large release or one that either occurred in a sensitive environment during transport or reached a sensitive environment could require additional documentation if longer term responses are required.	Same	Same	Similar	

Benchmarking Categories	MDA	U.S. Army	U.S. Air Force	Defense Logistics Agency	Notes
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these activities. Potential impacts are avoided or minimized using established protocols and procedures. Contaminated media is removed and treated IAW applicable regulations.	Same	Same	Unknown (but expected to be similar)	

**B-9. Temporary use of transportable power generators or operational support equipment when located in a previously disturbed area and when operated in compliance with applicable regulatory requirements.**

The temporary use of transportable power generators or operational support equipment contemplated by this CATEX is limited to those operated in compliance with applicable regulatory requirements and would be located in previously disturbed areas and operated to minimize disruption to the on-going activities at the existing site.

Specifically, limiting the CATEX to only those generators that are operated in compliance with applicable regulatory requirements ensures that:

- 1) Generator emissions meet permitted levels, which minimizes potential impacts to air resources, biological resources, and human health;
- 2) Generators are operated for specified allowed time periods, which minimize both total and cumulative emissions (air and noise);
- 3) Generator fuel storage and refilling activities are conducted in a protective manner and spill prevention procedures and cleanup procedures are identified and followed;
- 4) Site lighting is designed to minimize light “shine” and potential impact to animals at night; and
- 5) Generator operators are properly trained.

In addition, limiting the CATEX to only those generators and equipment that are sited in previously disturbed areas minimizes the potential impact to sensitive environments, biological resources, and cultural resources. Furthermore, limiting the CATEX to only those generators and operational support equipment that will be short term in duration minimizes the potential impacts from their use (if any).

The Team realized that minor trenching for running power cables could be required for safety reasons, if the cables could not rest on the surface of the ground or existing conduit were unavailable, but believed, based on our experience at host installations and test ranges, trenching (<3 feet deep) would be limited to existing easements and previously disturbed areas. By confining trenching to previously disturbed areas, existing easements, and shallow depths, we are minimizing the potential impact to sensitive environments, biological and cultural resources (i.e., less likely to run into a biological or cultural resource if the area was either in an existing easement or already disturbed and the depth of the trenching was limited to <3 feet).

As documented in Table B-9.1, the Team conducted a comparative analysis (or benchmarking) of MDA’s proposed CATEX to other applicable government organizations’ CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable standard operating procedures (SOPs), timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;

- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;
- 4) Extraordinary circumstances associated with its application is absent; and
- 5) No known significant impacts are associated with this proposed activity, beyond those resulting from accidental fuel spills during fueling activities, which are unplanned actions. Potential impacts are mitigated using spill containment equipment and SOPs.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusion and Administrative Record**

#### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(e)(2) Acquisition, installation, and operation of utility and communication systems, mobile antennas, data processing cable and similar electronic equipment that use existing right-of-way, easement, distribution systems, and/or facilities (REC required).

#### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(f)(15) Modification of existing systems or equipment when the environmental effects will remain substantially the same and the use is consistent with applicable regulations.

(f) (36) Acquisition, installation, and operation of utility (e.g., water, sewer, electrical) and communication systems (e.g., data processing cable and similar electronic equipment) which use existing rights of way, easements, distribution systems, and/or facilities.

#### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.12. Installing, operating, modifying, and routinely repairing and replacing utility and communications systems, data processing cable, and similar electronic equipment that use existing rights of way, easements, distribution systems, or facilities.

**U.S. Department of Rural Utilities Services**

**Reference:** *7 CFR, 1794.3, Rural Utilities Services Environmental Policies and Procedures*

Construction of standby diesel electric generators (one megawatt or less total capacity) and associated facilities, for the primary purpose of providing emergency power, at an existing applicant headquarters or district office, telecommunications switching site, or at an industrial, commercial or agricultural facility served by the applicant.

**Missile Defense Agency Environmental Reviews**

**Reference:** *Theater High Altitude Area Defense (THAAD) Pacific Test Flights Environmental Assessment, December 2002, resulting in a FONSI*

Numerous proposed activities were analyzed, including the operation of THAAD prime power units, each of which provided >1.3 megawatts of power using multiple diesel-fueled generators. Thirteen broad areas of environmental consideration were considered for assessing potential impacts and MDA determined that no significant impacts would occur as a result of the construction and operation of the THAAD generators and other equipment.

Over the course of 6 years, MDA conducted a-half dozen THAAD tests at PMRF and no environmental impacts were observed, as documented in mitigation monitoring reports.

**Reference:** *Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Environmental Impact Statement, July 2003*

Numerous proposed activities were analyzed, including the use of diesel-fueled power generators to support transportable radars, communications equipment, and various supporting equipment. Fourteen broad areas of environmental consideration were considered for assessing potential impacts and MDA determined that the use of these generators and support equipment would not have significant environmental effects.

Since the construction of the GMD ETR, MDA has conducted an average of one to two flight tests per year with no observed environmental impacts from siting or operating transportable power generators or support equipment.

**Reference:** *Missile Defense Agency Ground-Based Midcourse Defense Northeast Remote In-Flight Interceptor Communication System Data Terminal Environmental Assessment, May 2004, resulting in a FONSI*

Numerous proposed activities were analyzed, including the installation and operation of emergency diesel generators and support equipment on a permanent basis. Between generator testing and operations during power outages, it is estimated that the onsite backup generators would operate for less than 500 hours per year, every year for the life of the Integrated Data Terminal (IDT) Support Facility (ISFAC). Thirteen broad areas of environmental consideration were considered for assessing potential impacts and MDA

determined that the use of these generators and support equipment would not have significant environmental effects.

Construction of the IDT is planned to begin in FY 2015. A review of the proposed activities under the current EA determined no further NEPA analysis was needed.

**Reference: *Missile Defense Agency Mobile Launch Platform (MLP) Environmental Assessment, June 2004, resulting in a FONSI***

Numerous proposed activities were analyzed, including the use of diesel-fueled generators to power BMDS test equipment and sensors. Thirteen broad areas of environmental consideration were considered for assessing potential impacts and MDA determined that no significant impacts would occur as a result of generator use and support equipment operations.

The MLP has been used on two to five missions per year since 2005 and no environmental impacts have been observed.

**Reference: *Mobile Sensors Environmental Assessment, September 2005, resulting in a FONSI***

Numerous proposed activities were analyzed; including a wide range in size of diesel-fueled generators to power BMDS test sensors and supporting equipment. For example:

- MPS-36 radar would be powered by a 500 kilowatt generator
- Mk-74 would be powered by a 250 kilowatt generator
- Radar Boresight Tower system would require a 5 kilowatt generator
- Mobile Range Safety System would be powered by two 100 kilowatt generators and a 50 kilowatt generator powering the communication shelter
- Stabilized High-Accuracy Optical Tracking System would be powered by a 50 kilowatt generator
- Rapid Optical Beam Steering Mobile Optical Tracking System would be powered by an 80 kilowatt generator.

Thirteen broad areas of environmental consideration were considered for assessing potential impacts and MDA determined that the use of these generators and support equipment would not have significant environmental effects. Specifically, the EA stated that emissions associated with the generators would impact local air quality; however, even if the emissions occurred within the most stringent nonattainment area associated with the land-based test sites (a severe nonattainment area for ozone); the emission values would most likely not exceed the *de minimis* emission levels. In addition, because the location where the mobile land-based sensors and their associated generators and equipment would be used are generally within active test ranges, sensitive populations (children, elderly) or locations (schools, population centers) would not be located near such emission sources. Lastly, MDA would be required to notify regulators, obtain all necessary permits, and in some cases complete an Air Conformity Applicability Analysis.

MDA has conducted numerous test activities using mobile sensors and their supporting diesel-fueled generators and support equipment, including the operation of the AN/TPY-2 radar in Juneau, AK and Wake Island; the installation and operation of communications and telemetry equipment in Cordova, AK; the placement and operation of sensors at PMRF; and deployment and operation of the transportable telemetry system at Whidbey Island, WA and no environmental impacts have been observed.

**Reference: *Missile Defense Agency Siting and Operating the Forward-Based X-Band Transportable (FBX-T) Radar in Japan Environmental Review, September 2006***

Numerous proposed activities were analyzed, including the construction and operation of an FBX-T radar installation powered using ultra-low sulfur diesel-fueled generators in Shariki, Japan. Eleven broad areas of environmental resources were analyzed and MDA determined that no significant impacts would occur as a result of generator operations.

MDA has been operating these diesel-fueled generators since building the facility in 2007. In 2010, the site was switched over to commercial power, with the generators remaining for use as emergency backup generators. At no time has MDA observed any environmental impacts from these operations.

**Reference: *Missile Defense Agency Ballistic Missile Defense System (BMDS) Programmatic Environmental Impact Statement, January 2007***

The complete spectrum of MDA BMDS test activities were analyzed, including the use of diesel-fueled generators to power sensors and support equipment at test ranges around the world. Thirteen broad areas of environmental consideration were considered for assessing potential impacts and MDA determined that use of these diesel-fueled generators and support equipment would not have significant environmental effects on a programmatic basis.

MDA has conducted at least four tests every year at locations around the world and no environmental impacts resulting from the use of diesel-fueled generators or support equipment have been observed.

**Reference: *Missile Defense Agency Relocatable In-Flight Interceptor Communications System Data Terminal #2 at Vandenberg Air Force Base, Supplemental Environmental Assessment, November 2007, resulting in a FONSI***

Numerous proposed activities were analyzed, including the use of diesel-fueled emergency backup generators to power equipment and sensors. Thirteen broad areas of environmental consideration were considered for assessing potential impacts and MDA determined that no significant impacts would occur as a result of generator operations.

No environmental impacts have been observed as a result of MDA's construction and operation of the IDT #2 and supporting facilities, including the operation of the emergency back-up generators at VAFB.

**Reference: *REC AN/TPY-2 Radar Deployment at the Ted Stevens Marine Research Institute (TSMRI) on the National Oceanic and Atmospheric Administration (NOAA) Site in Juneau, Alaska in Support of Flight Test Ground-Based Interceptor (FTG) -04, May 2004. Qualifies for Army CATEX (E)(2).***

The proposed action among other things was to provide small back-up generators for emergency use and that would be periodically exercised according to maintenance schedules. Other operational and system components for the AN/TPY-2 would also be installed onsite including the auxiliary equipment: Antenna Equipment Unit, Cooling Equipment Unit and Electrical Equipment Unit.

**Reference: *AF 813 Temporary Use of Transportable Telemetry Equipment at Eareckson AFS in support of Flight Test 04-5, August 2005. Qualifies for Air Force CATEX A2.3.12.***

The proposed action included among other things the installation and use of two 60 KW diesel electric generators with double-walled fuel tanks, and two Connex trailers, one for TM storage and one for TM equipment and/or general storage.

**Reference: *AF 813 Beddown of Missile Defense Agency (MDA) Mobile Telemetry system at Kaena Point Satellite Tracking Station, December, 2010. Qualifies for CATEX AF A2.3.12.***

The proposed action included among other things the installation and use of an uninterrupted power system and backup generators.

**Reference: *AF 813 VAFB Re-Route Power Lines to Underground at Launch Facilities (LF-02, LF-03, LF-21, LF-23), October 2011. Qualifies for Air Force CATEX A2.3.12.***

The proposed action included among other things the use of an additional rental generator while moving the power lines to underground at the LFs.

**Table B-9.1 Comparative Analysis of MDA CATEX B-9 to Other Agency CATEXs.**

Benchmarking Categories	MDA	U.S. Army	U.S. Navy	U.S. Air Force	U.S. Department of Rural Utilities Services	Notes
Applicable CATEXs	B-9	(e)(2)	(f)(15) and (f)(36)	A2.3.12	7 CFR, 1794.3	
Characteristics of the Action	<p>Temporary installation and use of electric generators and operational support equipment (e.g., communication vans with integrated generators) set up on previously disturbed/used area (dirt, gravel, or concrete/asphalt pad) several weeks or months prior to BMDS test event to provide either primary or back-up power/support during BMDS test event. Equipment can be used for 1-4 hours a day prior to a test event and run full-time through completion of the actual test event, which typically only lasts 4-12 hours, but could be repeated if the test was postponed to a back-up day. Equipment is retrograded within several weeks of completion of BMDS test events.</p> <p>Limited site preparations (e.g., grading, filling, trenching, etc.) if any, are conducted; spill containment barriers are used to contain fuel spills and coolant leaks. Temporary fencing, lightning protection systems, and lighting would be installed per local requirements to minimize “shine.”</p> <p>Wiring can either lie on ground or be in conduit; if site conditions and time permits, cabling can be placed in shallow trenches dug in previously disturbed areas and utility easements.</p> <p>Diesel fuel provided by installation or approved contractor and conforms to air permit and local requirements (e.g., ultra low sulfur fuel).</p> <p>Installation and operation of equipment is confined to host installation (or in extremely limited instances, private property where similar actions are permitted).</p>	<p>Proposed action is limited to acquisition, installation, and operation of utility and communication systems, mobile antennas, data processing cable and similar electronic equipment that use existing right-of-way, easement, distribution systems, and/or facilities (REC required).</p> <p>MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, USAKA; WSMR, NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.</p>	<p>(f)(15) Proposed action is limited to modification of existing systems or equipment when the environmental effects will remain substantially the same and the use is consistent with applicable regulations.</p> <p>(f)(36) Proposed action is limited to acquisition, installation, and operation of utility (e.g., water, sewer, electrical) and communication systems (e.g., data processing cable and similar electronic equipment) which use existing rights of way, easements, distribution systems, and/or facilities.</p> <p>MDA has extensive experience working at U.S. Navy installations such as PMRF, HI; Point Mugu Sea Range, CA; San Nicolas Island, CA; and Dahlgren Naval Base, VA.</p>	<p>Proposed action is limited installing, operating, modifying, and routinely repairing and replacing utility and communications systems, data processing cable, and similar electronic equipment that use existing rights of way, easements, distribution systems, or facilities.</p> <p>MDA has extensive experience working at U.S. Air Force Installations such as Vandenberg AFB, CA; Edwards AFB, CA; Wake Island; Clear AFS, AK; Elmendorf AFB, AK; Eareckson AFS, AK; and Schriever AFB, CO.</p>	<p>Proposed action is limited to the construction of standby diesel electric generators (one megawatt or less total capacity) and associated facilities, for the primary purpose of providing emergency power, at an existing applicant headquarters or district office, telecommunications switching site, or an industrial, commercial or agricultural facility served by the applicant.</p>	<p>Temporary installation and use limits the potential temporal effects of the proposed action.</p> <p>Limiting proposed action to areas that are previously disturbed/used minimizes the potential to disturb sensitive environmental and/or cultural resources.</p> <p>Relying on limited site preparation minimizes potential impacts from construction activities.</p> <p>Use of spill containment barriers prevents contamination of soil in the event of a fuel spill.</p> <p>Temporary fencing keeps unprotected populations from entering the site.</p> <p>Requiring lighting to meet local requirements/restrictions prevents unnecessary “shine” and potential impact to night time behavior.</p> <p>Limiting trenching to shallow depths in established easements minimizes the potential to disturb sensitive environments and cultural resources.</p> <p>Applying permit conditions and local requirements minimizes potential air impacts.</p>
Methods of Implementing the Action	<p>Obtain test plan and Continuity of Operations (CONOPs) from MDA test proponent.</p> <p>Work with host installation or property owner to find suitable location and permission to install and operate equipment.</p> <p>Work with host installation or property owner to identify applicable laws, regulations, and SOPs.</p> <p>Work with host installation or property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation or property owner to conduct any required site preparation activities.</p> <p>Work with host installation or property owner to conduct any required coordination with Federal and state agencies.</p> <p>Deploy equipment to site, install, test, and operate equipment per Test CONOPs.</p>	<p>Coordinate with installation staff to identify applicable laws, regulations, management plans, SOPs, and existing areas with known natural and/or cultural resources and/or environmental contamination.</p> <p>Coordinate with installation staff to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Conduct any required coordination with Federal and state agencies.</p>	Same	Same	Similar, except that proposed action is intended for short-term operations over the life of the facility.	Use of diesel-fueled generators and operational support equipment at host installation and test ranges is a usual and customary activity, which conforms to the installation/range’s Master Plan.

Benchmarking Categories	MDA	U.S. Army	U.S. Navy	U.S. Air Force	U.S. Department of Rural Utilities Services	Notes
	Record generator run time and fuel usage (as required).  Retrograde equipment and restore site to original condition (or agreed upon condition – e.g., leaving behind grounding grids or sound barriers).					
<b>Frequency of the Actions</b>	Generally one time. However, at larger installations, MDA could conduct up to two tests/year at any given location.	MDA is long-standing range customer and our test events are built into the host installation/range operations and test schedule. Test installations/ranges are managed to run at optimum capacity, year round, to maintain required staff and equipment.	Same	Same	Periodic, routine testing and emergency use. Similar to MDA uses during extended waiting periods when test activities are delayed.	Typical range operations subject to conditions of installation's regulatory permits and master schedule.
<b>Applicable Regulations</b>	NEPA, CAA, U.S. EPA Tier 4 emissions regulations, and applicable state regulations.	Same, plus UES	Same	Same	Same	
<b>Applicable SOPs</b>	Installation/Manufacturer specific	Same	Same	Same	Same	
<b>Timing and Context</b>	Generator and/or support equipment used to support BMDS test events and could occur any time of the year. Equipment, many times, is tactical or operational equipment and is in short supply; therefore, it is moved to other locations as needed.  BMDS test events are typically conducted at host installations designed to conduct same types of testing. MDA relies on installation's infrastructure and sensors. However, some BMDS components being tested are either the specific system under test or are brought in to augment those operated by the range/installation. If adequate power is available from host installation, MDA will use available power. However, some systems require their own power. For example, the standalone tactical radar systems (e.g., the AN/TPY-2 radar) can either use available power or generator power; where as a missile interceptor and radar weapon system (e.g., THAAD or PAC-3 systems) requires the use of their own tactical generators. Other times, for test reliability purposes, the system under test will run off of host power (or shore power) and use tactical or operational generators as backup.  On rare occasions a radar or sensor will be required to be sited and operated on property other than a Military Service site. The same SOPs, requirements, procedures apply.	Same	Same	Same	Permanent	
<b>Extraordinary Circumstances</b>	BMDS test events can be delayed and equipment could be left at a test site for a while longer (e.g., several months) than anticipated.	Same	Same	Same	Extended periods of outage requiring excessive use.	
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no significant impacts from generator or support equipment use beyond those resulting from accidental spills of coolants or fuel during fueling activities. Potential impacts are mitigated using spill containment equipment and fueling SOPs. Contaminated media is removed and treated IAW applicable regulations.	Same	Same	Same	Unknown (but expected to be similar)	

Table B-9.2 Comparative Analysis of MDA CATEX B-9 to MDA Environmental Analyses.

Benchmarking Categories	MDA	Theater High Altitude Area Defense (THAAD) Pacific Test Flights Environmental Assessment, December 2002, FONSI Signed	Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Environmental Impact Statement, July 2003	MDA Ground-Based Midcourse Defense Northeast Remote In-Flight Interceptor Communication System Data Terminal Environmental Assessment, May 2004, FONSI Signed	MDA Mobile Launch Platform (MLP) Environmental Assessment, June 2004, FONSI Signed	Mobile Sensors Environmental Assessment, September 2005, FONSI Signed	MDA Siting and Operating the Forward-Based X-Band Transportable (FBX-T) Radar in Japan Environmental Review, September 2006	Missile Defense Agency Ballistic Missile Defense System (BMDS) Programmatic Environmental Impact Statement, January 2007	MDA Relocatable In-Flight Interceptor Communications System Data Terminal (IDT) #2 at Vandenberg Air Force Base, Supplemental Environmental Assessment, November 2007, FONSI Signed
Applicable CATEXs	B-9								
<p><b>Characteristics of the Action</b></p> <p>Temporary installation and use of electric generators and operational support equipment (e.g., communication vans with integrated generators) set up on previously disturbed / used area (dirt, gravel, or concrete/asphalt pad) several weeks or months prior to BMDS test event to provide either primary or backup power / support during BMDS test event. Equipment can be used for 1-4 hours a day up to 24/7 during the actual BMDS test event, which only lasts 4-12 hours. Equipment is retrograded within several weeks of completion of BMDS test event.</p> <p>Limited site preparations (e.g., grading, filling, trenching, etc.) if any, if any, are conducted; spill containment barriers are used to contain fuel spills and coolant leaks. Temporary fencing, lightning protection systems, and lighting would be installed per local requirements to minimize "shine."</p> <p>Wiring can either lie on ground or be in conduit; if site conditions and time permits, cabling can be placed in shallow trenches dug in previously disturbed areas and utility easements.</p> <p>Diesel fuel provided by installation and conforms to air permit and local requirements (e.g., ultra low sulfur fuel).</p> <p>Installation and operation of equipment is confined to host installation (or in extremely limited instances, private property where similar actions are permitted).</p>		<p>Numerous proposed activities were analyzed, including the operation of THAAD prime power units, each of which provides &gt;1.3 megawatts of power using multiple diesel-fueled generators.</p>	<p>Numerous proposed activities were analyzed, including the use of diesel-fueled power generators to support transportable radars, communications equipment, and various supporting equipment.</p>	<p>Numerous proposed activities were analyzed, including the installation and operation of emergency diesel generators and support equipment. Between generator testing and operations during power outages, it is estimated that the onsite backup generators would operate for less than 500 hours per year, every year for the life of the IDT ISFAC.</p>	<p>Numerous proposed activities were analyzed, including the use of diesel-fueled generators to power BMDS test equipment and sensors.</p>	<p>Numerous proposed activities were analyzed, including the use of a wide range in size of diesel-fueled generators to power BMDS test sensors and supporting equipment.</p> <p>The EA stated that emissions associated with the generators would impact local air quality; however, even if the emissions occurred within the most stringent nonattainment area associated with the land-based test sites (a severe nonattainment area for ozone), the emission values would most likely not exceed the <i>de minimis</i> emission levels. In addition, because the location where the mobile land-based sensors and their associated generators would be used are typically within active test ranges, sensitive populations (children, elderly) or locations (schools, population centers) would not be located near such emission sources. The EA also stated that MDA would be required to notify regulators, obtain all necessary permits, and in some cases complete an Air Conformity Applicability Analysis.</p>	<p>Numerous proposed activities were analyzed, including the construction and operation of an FBX-T radar installation powered using ultra-low sulfur diesel-fueled generators in Shariki, Japan.</p>	<p>The complete spectrum of MDA BMDS test activities were analyzed, including the use of diesel-fueled generators to power sensors and supporting equipment at test ranges around the world.</p>	<p>Numerous proposed activities were analyzed, including the use of diesel-fueled emergency backup generators to power equipment and sensors.</p>

Benchmarking Categories	MDA	Theater High Altitude Area Defense (THAAD) Pacific Test Flights Environmental Assessment, December 2002, FONSI Signed	Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Environmental Impact Statement, July 2003	MDA Ground-Based Midcourse Defense Northeast Remote In-Flight Interceptor Communication System Data Terminal Environmental Assessment, May 2004, FONSI Signed	MDA Mobile Launch Platform (MLP) Environmental Assessment, June 2004, FONSI Signed	Mobile Sensors Environmental Assessment, September 2005, FONSI Signed	MDA Siting and Operating the Forward-Based X-Band Transportable (FBX-T) Radar in Japan Environmental Review, September 2006	Missile Defense Agency Ballistic Missile Defense System (BMDS) Programmatic Environmental Impact Statement, January 2007	MDA Relocatable In-Flight Interceptor Communications System Data Terminal (IDT) #2 at Vandenberg Air Force Base, Supplemental Environmental Assessment, November 2007, FONSI Signed
Applicable CATEXs	B-9								
Methods of Implementing the Action	<p>Obtain test plan and CONOPs from MDA test proponent.</p> <p>Work with host installation or property owner to find suitable location and permission to install and operate equipment.</p> <p>Work with host installation or property owner to identify applicable laws, regulations, and SOPs.</p> <p>Work with host installation or property owner to either prepare necessary NEPA documentation.</p> <p>Work with host installation or property owner to conduct any required site preparation activities.</p> <p>Deploy equipment to site, install, test, and operate equipment per Test CONOPs.</p> <p>Record generator run time and fuel usage (as required).</p> <p>Retrograde equipment and restore site to original condition (or agreed upon condition – e.g., leaving behind grounding grids or sound barriers).</p>	Same	Same	Permanent installation and operation.	Same	Same	Permanent installation and operation.	Same	Permanent installation and operation.
Frequency of the Actions	Generally one time. However, at larger installations, MDA could conduct up to two tests/year at any given location.	Up to two flight tests a year.	Up to two flight tests a year.	24 hours/7 days a week operations.	Up to four flight tests per year.	Up to four flight tests per year.	24 hours/7 days a week operations.	Variable.	24 hours/7 days a week operations.
Applicable Regulations	NEPA, CAA, EPA Tier 4 emissions regulations, and applicable state regulations.	Same	Same	Same	Same	Same	Same, Final Governing Standards	Same	Same
Applicable SOPs	Installation/Manufacturer specific	Same	Same	Same	Same	Same	Same	Same	Same
Timing and Context	Generator and/or support equipment used to support BMDS test events could occur any time of the year. Equipment, many times, is	Same	Same	24 hours/7 days a week operations.	Same	Same	24 hours/7 days a week operations.	Variable	24 hours/7 days a week operations.

Benchmarking Categories	MDA	Theater High Altitude Area Defense (THAAD) Pacific Test Flights Environmental Assessment, December 2002, FONSI Signed	Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Environmental Impact Statement, July 2003	MDA Ground-Based Midcourse Defense Northeast Remote In-Flight Interceptor Communication System Data Terminal Environmental Assessment, May 2004, FONSI Signed	MDA Mobile Launch Platform (MLP) Environmental Assessment, June 2004, FONSI Signed	Mobile Sensors Environmental Assessment, September 2005, FONSI Signed	MDA Siting and Operating the Forward-Based X-Band Transportable (FBX-T) Radar in Japan Environmental Review, September 2006	Missile Defense Agency Ballistic Missile Defense System (BMDS) Programmatic Environmental Impact Statement, January 2007	MDA Relocatable In-Flight Interceptor Communications System Data Terminal (IDT) #2 at Vandenberg Air Force Base, Supplemental Environmental Assessment, November 2007, FONSI Signed
Applicable CATEXs	B-9								
	tactical or operational equipment and is in short supply; therefore, it is moved to other locations as needed.  BMDS test events are typically conducted at host installations designed to conduct same types of testing. MDA relies on installation's infrastructure and sensors. However, some BMDS components being tested are either the specific system under test or are brought in to augment those operated by the range/installation. If adequate power is available from host installation, MDA will use available power. However, some systems require their own power. For example, the stand alone tactical radar systems (e.g., the AN/TPY-2 radar) can either use available power or generator power; where as a missile interceptor and radar weapon system (e.g., THAAD or PAC-3 systems) requires the use of their own tactical generators. Other times, for test reliability purposes, the system under test will run off of host power (or shore power) and use tactical or operational generators as backup.								
Extraordinary Circumstances	BMDS test events can be delayed and equipment could be left at a test site for a while longer (e.g., several months) than anticipated.	Same	Same		Same	Same		Same	
Known Impacts from Proposed Action	After 20+ years of activities, MDA knows of no significant impacts from generator or support equipment use beyond those resulting from accidental spills of coolants or fuel during fueling activities. Potential impacts are mitigated using spill containment equipment and fueling SOPs. Contaminated	Over the course of 6 years, MDA conducted a-half dozen THAAD tests at the Pacific Missile Range Facility and no environmental impacts were observed as documented in mitigation monitoring reports.	Since the construction of the GMD ETR, MDA has conducted an average of one-two flight tests a year and operated the Sea-Based X-Band Radar nearly continuously and no environmental impacts were observed.	The ISFAC facility has not yet been built; therefore, the FONSI cannot yet be substantiated at this time.	The MLP has been used on two to five missions per year since 2005 and no environmental impacts have been observed.	MDA has conducted numerous test activities using mobile sensors and their supporting diesel-fueled generators, including the operation of the AN/TPY-2 radar in Juneau, AK and Wake Island, the installation and operation of communications and	MDA has been operating these diesel-fueled generators since building the facility in 2007. In 2010, the site was switched over to commercial power, with the generators remaining for use as emergency backup generators. At no time has MDA observed any	MDA has conducted at least four tests every year at locations around the world and no environmental impacts resulting from the use of diesel-fueled generators or support equipment have been observed.	No environmental impacts have been observed as a result of MDA's construction and operation of the IDT #2 and supporting facilities, including the operation of the emergency backup generators at VAFB.

Benchmarking Categories	MDA	Theater High Altitude Area Defense (THAAD) Pacific Test Flights	Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR)	MDA Ground-Based Midcourse Defense Northeast Remote In-Flight Interceptor	MDA Mobile Launch Platform (MLP)	Mobile Sensors	MDA Siting and Operating the Forward-Based X-Band Transportable (FBX-T) Radar in Japan	Missile Defense Agency Ballistic Missile Defense System (BMDS)	MDA Relocatable In-Flight Interceptor Communications System
Applicable CATEXs	B-9	Environmental Assessment, December 2002, FONSI Signed	Environmental Impact Statement, July 2003	Communication System Data Terminal Environmental Assessment, May 2004, FONSI Signed	Environmental Assessment, June 2004, FONSI Signed	September 2005, FONSI Signed	Environmental Review, September 2006	Programmatic Environmental Impact Statement, January 2007	Data Terminal (IDT) #2 at Vandenberg Air Force Base, Supplemental Environmental Assessment, November 2007, FONSI Signed
	media is removed and treated IAW applicable regulations.					telemetry equipment in Cordova, AK, the placement and operation of sensors at PMRF, and deployment and operation of the transportable telemetry system at Whidbey Island, WA and no environmental impacts have been observed.	environmental impacts from these operations.		

**B-10. Routine movement, handling, use and distribution of materials, including hazardous materials or wastes that are moved, handled, or distributed in accordance with applicable regulations, such as Resource Conservation and Recovery Act (RCRA), Occupational Safety and Health Administration (OSHA) and Hazardous Materials Transportation Act (HMTA).**

The Team examined the various activities undertaken throughout the Agency to determine the extent to which materials contemplated by this CATEX were procured, transported, distributed, used, and stored during the normal course of operations. A number of these materials are considered to be hazardous materials, including fuels for vehicles and equipment, solid and liquid propellants, and oxidizers. The Team found that actions of a similar nature, scope, and intensity were quite common throughout the Agency in both operational and test activities. The majority of hazardous materials procured, transported, distributed, used, and stored were found to be commercially available materials.

The Team determined that the hazardous materials contemplated by this CATEX are transported and handled in accordance with applicable U.S. Department of Transportation (U.S. DOT) and Military Service regulations ((including DoD 4500.9-R, Defense Transportation Regulation, Part 2, Chapter 204 - Hazardous Materials and Air Force Manual, AFMAN 24-204 IP (Interservice)): Preparing Hazardous Materials for Military Air Shipments, 15 April 2007) to meet a variety of stringent requirements designed to protect human health and safety and the quality of the human environment. The Team also found actions of a similar nature, scope, and intensity was performed in compliance with Federal, tribal, state, or local law and/or regulatory policy.

This CATEX is supported by administrative records from MDA mission activities developed through the NEPA process. The Team noted other Federal agencies, in particular Services, have CATEXs for similar activities sufficiently descriptive that it could be determined they included a much broader range of activities and encompassed activities of generally greater scope and intensity than any in MDA. The volume of materials procured by other Service agencies dwarf those of MDA. In addition, MDA like all Federal agencies, with very few exceptions, must meet the same requirements to protect the environment.

As documented in Table B-10.1 and B-10.2, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;
- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;

- 4) Extraordinary circumstances associated with its application is absent; and
- 5) No known significant impacts are associated with this proposed activity, beyond those resulting from accidental fuel spills during fueling activities, which are unplanned actions. Potential impacts are mitigated using spill containment equipment and SOPs.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusion and Administrative Record**

#### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(h) (4) Routine management, to include transportation, distribution, use, storage, treatment, and disposal of solid waste, medical waste, radiological and special hazards (for example, asbestos, PCBs, lead-based paint, or unexploded ordnance), and/or hazardous waste that complies with EPA, Army, or other regulatory agency requirements. This CATEX is not applicable to new construction of facilities for such management purposes.

#### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(16) Routine movement, handling and distribution of materials, including hazardous materials/wastes that are moved, handled, or distributed in accordance with applicable regulations.

#### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.28. Routine transporting of hazardous materials and wastes in accordance with applicable Federal, state, interstate, and local laws.

#### **U.S. Coast Guard**

**Reference:** *COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions*

(24) Routine movement of personnel and equipment, and the routine movement, handling, and distribution of non-hazardous materials and waste in accordance with applicable regulations.

## **Missile Defense Agency Environmental Reviews**

**Reference: *Exo-atmospheric Kill Vehicle (EKV) Final Assembly and Checkout Operations (FACO) at Redstone Arsenal, Alabama Supplemental Environmental Assessment, March 2000, resulting in a FONSI***

This EA analyzed the environmental impacts of three proposed main activities, one of which was transportation of the completed EKV's to the existing National Missile Defense interceptor Assembly, Test, and Checkout (AT&C) facility for final integration. The EKV is the missile payload that impacts and destroys an incoming missile. The EKV is transported to the FACO facility for final assembly and checkout prior to transport to the launch site.

Unloaded EKV subassemblies and pre-loaded bi-propellant tanks would be shipped to the EKV FACO facility in accordance with all appropriate DOT approved procedures.

The resulting environmental analysis showed no significant impacts would occur from the proposed EKV FACO activities. No adverse environmental impacts resulting from hazardous material handling and transport have been recorded during EKV FACO operations.

**Reference: *Ground-based Midcourse Defense Element Live Fire Test and Evaluation (LFT&E) Targets Environmental Assessment, October 2001, resulting in a FONSI***

This EA analyzed three main activities, one of which was the transportation of payload components to Vandenberg AFB. Deuterium fluoride (DF) seedant is the fuel used to launch the missile and would be shipped directly to Vandenberg AFB from the manufacturer by commercial carrier. Only enough seedant for two missile flights would be shipped to Vandenberg AFB at a time.

The re-entry vehicle (RV) and payload with high explosive (HE) would be transported to Vandenberg AFB from Lawrence Livermore National Laboratory/Sandia National Laboratories facilities by the Department of Energy Safe Secure Transport or by commercial carrier. The RV and payload would be stored in an approved facility at Vandenberg AFB until integrated into the target missile. Seedant filling equipment would be transported by commercial carrier to Missile Assembly Building (MAB) 1819. All transportation of the seedant and HE within the continental United States would be performed in accordance with U.S. DOT and U.S. Army approved explosive safety and hazardous material regulations and routing. The seedant and HE would be transported in U.S. DOT-approved shipping containers. Appropriate safety measures would be followed during transportation of the seedant and HE as required by U.S. DOT and as described in the Bureau of Explosives (BOE) Tariff No. BOE 6000-1, *Hazardous Materials Regulations of the Department of Transportation*. For aircraft transportation, Federal Aviation Administration (FAA) and/or applicable U.S. Air Force safety regulations would be followed.

Implementation of the proposed action would result in negligible impacts to resources on Vandenberg AFB. All activities would be in compliance with applicable Federal, state and local regulations and requirements. The resulting environmental analysis showed no significant impacts would occur.

All activities have been in compliance with applicable Federal, state and local regulations and requirements and no adverse environmental impacts resulting from hazardous material handling and transport have been recorded or observed during these operations.

**Reference: *Liquid Propellant Missile (LPM) Site Preparation and Launch Environmental Assessment, July 2002, resulting in a FONSI***

This EA analyzed two LPMs launched from a new ground surface site at Vandenberg AFB. The analysis looked at the environmental impacts of transporting the missile and liquid propellant to and storage at Vandenberg AFB.

The main fuel for the missile was coal tar distillate. For the two proposed launches, approximately 300 gallons of main fuel would be required per launch. Approximately 500 gallons of the oxidizer, inhibited red fuming nitric acid, would be required per launch. Also, approximately 10 gallons of initiator fuel would be used during each launch.

The missile would be transported to the propellant loading site, approximately one mile north of the launch site, for propellant loading operations. The propellants would be transported from the Hypergolic Storage Facility to the propellant loading area one day prior to fueling operations. When the main fuel and oxidizer have been loaded into the missile, the missile would be lowered onto the Mobile Launcher, which would then proceed to the launch area.

All activities would be in compliance with applicable federal, state and local regulations and requirements. The resulting environmental analysis showed no significant impacts would occur from the proposed transportation, LPM site preparation and launch activities. No environmental impacts resulting from hazardous material handling and transport have been recorded during these operations.

**Reference: *Ground-Based Midcourse Defense (GMD) Initial Defensive Operations Capability (IDOC) at Vandenberg Air Force Base Environmental Assessment, August 2003, resulting in a FONSI***

Numerous proposed activities were analyzed, including transportation of GBI missile boosters, payloads and support equipment by air or over-the road common carrier truck from U.S. Government storage depots or contractor facilities to Vandenberg AFB. All shipping would be conducted in accordance with applicable USAF, FAA and DOT regulations. Transportation of hazardous materials would be in accordance with DOT regulations for interstate shipment of hazardous materials found in 49 CFR parts 100-

199. Applicable safety regulations would be followed in the transport, receipt, storage and handling of hazardous materials.

Thirteen broad areas of environmental consideration were considered for assessing potential impacts and MDA determined that no significant impacts would occur as a result of handling and transporting GBIs and support equipment. No environmental impacts resulting from hazardous material handling and transport have been recorded during these operations.

**Reference: *Missile Defense Agency Courtland Target Assembly Facility Environmental Assessment, October 2006, resulting in a FONSI***

A portion of the Proposed Action would entail target components and boosters being transported via truck and/or rail to the Courtland Facility from locations that could include, but would not be limited to: Alliant Techsystems (ATK) in Ogden Utah; Orbital Sciences Corporation, Chandler, Arizona; Stennis Space Center, Mississippi; Strategic Weapons Facility Pacific (SWFPAC), Bangor, Washington; Hill AFB, Utah; Promontory Point Utah; Camp Navajo, Arizona; and the Lockheed Martin Huntsville Target Missile systems (TMS), Alabama. Transport of boosters and components would comply with all DOT requirements for shipping of explosive materials.

A conservative analysis would assume that under surge assembly conditions, a maximum of 20 targets would be assembled at Courtland per year. Under these conditions, a total of 80 roundtrip shipments by truck or railroad would be required assuming that each booster would be shipped individually by truck and/or rail to the Courtland Facility. A total of 160 trips would be made, although only 80 would be carrying hazardous material, as the returning transport vehicle would be assumed to be empty.

Twelve broad areas of environmental consideration were considered for assessing potential impacts and MDA determined that no significant impacts would occur as a result handling and transporting target components and boosters. No environmental impacts resulting from hazardous material handling and transport have been recorded during these operations.

**Table B-10.1 Comparative Analysis of MDA CATEX B-10 to Other Agency CATEXs.**

Benchmarking Categories	MDA	U.S. Army	U.S. Navy	U.S. Air Force	U.S. Coast Guard	Notes
Applicable CATEXs	B-10	(h)(4)	(f)(16)	A2.3.28	(24)	
Characteristics of the Action	<p>Routine movement, handling, use, and distribution of materials, including hazardous materials/wastes that are moved, handled, or distributed in accordance with applicable regulations, such as RCRA, OSHA and HMTA.</p> <p>Volumes of hazardous materials/wastes are generally less than the Military Services. Types of substances generally include batteries and solid or liquid propellant and/or oxidizers for missiles, hydrazine for some divert-altitude control (DAC) units (in interceptor missiles), diesel fuel for generators, antifreeze, maintenance products, cleaning supplies, and office supplies. Small amounts of explosives (e.g., squibs) are transported and integrated in either missile bodies or air launch target pallets.</p> <p>Solid propellants are integrated in the missile during manufacturing, liquid propellants are transported in specialized containers and loaded into the missile at the test site; DACs are filled with hydrazine at the manufacturing location; and batteries/squibs are generally deployed at test locations; all are transported IAW Federal, state, and the Military Service's requirements.</p> <p>Maintenance activities consume paint, oil and grease, small amounts of solvents or glues/mastic. Office and cleaning products are non-hazardous whenever feasible in keeping with MDA's Green Procurement Program.</p>	<p>Proposed action is limited to routine management, to include transportation, distribution, use, storage, treatment, and disposal of solid waste, medical waste, radiological and special hazards (for example, asbestos, PCBs, lead-based paint, or unexploded ordnance), and/or hazardous waste that complies with EPA, Army, or other regulatory agency requirements. This CATEX is not applicable to new construction of facilities for such management purposes.</p> <p>MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, USAKA; WSMR, NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.</p>	<p>Proposed action is limited to routine movement, handling and distribution of materials, including hazardous materials/wastes that are moved, handled, or distributed in accordance with applicable regulations.</p> <p>MDA has extensive experience working at U.S. Navy installations such as PMRF, HI; Point Mugu Sea Range, CA; San Nicolas Island, CA; and Dahlgren Naval Base, VA.</p>	<p>Proposed action is limited to routine transporting of hazardous materials and wastes in accordance with applicable Federal, state, interstate, and local laws.</p> <p>MDA has extensive experience working at U.S. Air Force Installations such as Vandenberg AFB, CA; Edwards AFB, CA; Wake Island; Clear AFS, AK; Elmendorf AFB, AK; Eareckson AFS, AK; and Schriever AFB, CO.</p>	<p>Proposed action is limited to routine movement of personnel and equipment, and the routine movement, handling, and distribution of non-hazardous materials and waste in accordance with applicable regulations.</p>	<p>Strict and detailed regulations govern these activities.</p>
Methods of Implementing the Action	<p>Work with host installation or property owner to identify applicable laws, regulations, management plans, and SOPs.</p> <p>Work with host installation or property owner to obtain required permits and record and report usage and disposal.</p> <p>Work with host installation or property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation or property owner to conduct any required coordination with Federal and state agencies.</p> <p>Ensure materials are transported, stored and handled in appropriate manner.</p>	<p>Coordinate with installation staff to identify applicable laws, regulations, management plans, SOPs.</p> <p>Installation staff obtains required permits and record and report usage and disposal.</p> <p>Installation staff to either reviews existing documentation and/or prepares necessary NEPA documentation.</p> <p>Conduct any required coordination with Federal and state agencies.</p> <p>Ensure materials are transported, stored and handled in appropriate manner.</p>	<p>Same</p>	<p>Same</p>	<p>Similar</p>	<p>All these activities are conducted according to detailed regulations that are fundamentally consistent across Federal agencies, although state regulations may differ.</p>

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Navy</b>	<b>U.S. Air Force</b>	<b>U.S. Coast Guard</b>	<b>Notes</b>
<b>Frequency of the Actions</b>	Majority of MDA's hazardous material handling and transport activities usually occurs in conjunction with missile assembly and transport related to test events. Amounts of hazardous materials are typically not large, especially compared to the large amounts of fuel and hazardous materials used on a daily basis by the Military Services.	Greater	Greater	Greater	Unknown	Typical range operations are subject to conditions of host installation's regulatory permits and management plans.
<b>Applicable Regulations</b>	NEPA, CERCLA, RCRA, CWA, CAA HMTA and other applicable Federal and state regulations, DoD and Military Service requirements, and industry standards.	Same	Same	Same	Same	
<b>Applicable SOPs</b>	Installation specific, but most are consistent among installations, because of proscriptive nature of Federal and state regulations.	Same	Same	Same	Same	
<b>Timing and Context</b>	MDA use, transport, and disposal are mostly in conjunction with test activities. Maintenance activities regularly occur per maintenance schedules or when situations require attention. Office products (e.g., printer toner) and cleaning products are used every day.	Continuous over time at high levels relative to MDA.	Continuous over time at high levels relative to MDA.	Continuous over time at high levels relative to MDA.	Continuous over time at high levels relative to MDA.	
<b>Extraordinary Circumstances</b>	The large-scale movement of hazardous materials or generation of hazardous waste is unlikely, but could potentially occur if an entire weapon system were to be decommissioned.	Same	Same	Same	Same	
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these types of operations.	Same	Same	Same	Same	

**Table B-10.2 Comparative Analysis of MDA CATEX B-10 to MDA Environmental Analyses.**

Benchmarking Categories	MDA	Exo-atmospheric Kill Vehicle (EKV) Final Assembly and Checkout Operations (FACO) at Redstone Arsenal, Alabama Supplemental Environmental Assessment, March 2000, FONSI Signed	Ground-based Midcourse Defense Element Live Fire Test and Evaluation (LFT&E) Targets Environmental Assessment, October 2001, FONSI Signed	Liquid Propellant Missile (LPM) Site Preparation and Launch Environmental Assessment, July 2002, FONSI Signed	Ground-Based Midcourse Defense (GMD) Initial Defensive Operations Capability (IDOC) at Vandenberg Air Force Base Environmental Assessment, August 2003, FONSI Signed	Missile Defense Agency Courtland Target Assembly Facility Environmental Assessment, October 2006, FONSI Signed
Applicable CATEXs	B-10					
<b>Characteristics of the Action</b>	<p>Routine movement, handling, use, and distribution of materials, including hazardous materials/wastes that are moved, handled, or distributed in accordance with applicable regulations, such as RCRA, OSHA and HMTA.</p> <p>Volumes of hazardous materials/wastes are generally less than the Military Services. Types of substances generally include batteries and solid or liquid propellant and/or oxidizers for missiles, hydrazine for some DAC units (in interceptor missiles), diesel fuel for generators, antifreeze, maintenance products, cleaning supplies, and office supplies. Small amounts of explosives (e.g., squibs) are transported and integrated in either missile bodies or air launch target pallets.</p> <p>Solid propellants are integrated in the missile during manufacturing, liquid propellants are transported in specialized containers and loaded into the missile at the test site, DACs are filled with hydrazine at the manufacturing location, and batteries/squibs are generally deployed at test locations; all are transported IAW Federal, state, and the Military Services' requirements.</p> <p>Maintenance activities consume paint, oil and grease, small amounts of solvents or glues/mastic. Office and cleaning products are non-hazardous whenever feasible in keeping with MDA's Green Procurement Program.</p>	<p>The EA analyzed the environmental impacts of three proposed main activities, one of which would be transportation of the completed EKVs to the existing NMD interceptor AT&amp;C facility for final integration. The EA analyzed transport of unloaded EKV subassemblies and pre-loaded bi-propellant tanks to the EKV FACO facility in accordance with all appropriate DOT approved procedures.</p>	<p>The EA analyzed the transport of missile payload components to Vandenberg VAFB, from Lawrence Livermore/ Sandia National Laboratories and final storage at VAFB. It was planned for the DF seedant to be shipped directly to Vandenberg AFB from the manufacturer by commercial carrier. Only enough seedant for two missile flights would be shipped to VAFB at a time.</p>	<p>This EA analyzed the environmental impacts of transporting the missile and liquid propellant to and storage at Vandenberg AFB.</p> <p>The main fuel for the missile was coal tar distillate. For the two proposed launches, approximately 300 gallons of main fuel would be required per launch. Approximately 500 gallons of the oxidizer, inhibited red fuming nitric acid, would be required per launch. Also, approximately 10 gallons of initiator fuel would be used during each launch.</p> <p>The missile would be transported to the propellant loading site, approximately one mile north of the launch site, for propellant loading operations. The propellants would be transported from the Hypergolic Storage Facility to the propellant loading area one day prior to fueling operations. When the main fuel and oxidizer have been loaded into the missile, the missile would be lowered onto the Mobile Launcher, which would then proceed to the launch area.</p>	<p>Numerous proposed activities were analyzed, including the transport of GBI missile boosters, payloads and support equipment by air or over-the-road common carrier truck from U.S. Government storage depots or contractor facilities to VAFB. All shipping would be conducted in accordance with applicable USAF, FAA and DOT regulations. Transportation of hazardous materials would be in accordance with DOT regulations for interstate shipment of hazardous materials found in 49 CFR parts 100-199. The interceptor would be placed in existing Vandenberg AFB facilities for assembly and check-out. Applicable safety regulations would be followed in the transport, receipt, storage and handling of hazardous materials.</p>	<p>A portion of the proposed action would entail target components and boosters being transported via truck and/or rail to the Courtland Facility from locations that could include, but would not be limited to: ATK in Ogden Utah; Orbital Sciences Corporation, Chandler, Arizona; Stennis Space Center, Mississippi; SWFPAC, Bangor, Washington; Hill AFB, Utah; Promontory Point Utah; Camp Navajo, Arizona; and the Lockheed Martin Huntsville TMS, Alabama. Transport of boosters and components would comply with all DOT requirements for shipping of explosive materials.</p>
<b>Methods of Implementing the Action</b>	<p>Work with host installation or property owner to identify applicable laws, regulations, management plans, and SOPs.</p> <p>Work with host installation or property owner to obtain required permits and to record and report usage and disposal.</p> <p>Work with host installation or property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p>	Same	Same	Same	Same	Same

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>Exo-atmospheric Kill Vehicle (EKV) Final Assembly and Checkout Operations (FACO) at Redstone Arsenal, Alabama Supplemental Environmental Assessment, March 2000, FONSI Signed</b>	<b>Ground-based Midcourse Defense Element Live Fire Test and Evaluation (LFT&amp;E) Targets Environmental Assessment, October 2001, FONSI Signed</b>	<b>Liquid Propellant Missile (LPM) Site Preparation and Launch Environmental Assessment, July 2002, FONSI Signed</b>	<b>Ground-Based Midcourse Defense (GMD) Initial Defensive Operations Capability (IDOC) at Vandenberg Air Force Base Environmental Assessment, August 2003, FONSI Signed</b>	<b>Missile Defense Agency Courtland Target Assembly Facility Environmental Assessment, October 2006, FONSI Signed</b>
<b>Applicable CATEXs</b>	B-10					
	Work with host installation or property owner to conduct any required coordination with Federal and state agencies.  Ensure materials are transported, stored and handled in appropriate manner.					
<b>Frequency of the Actions</b>	Majority of MDA's hazardous material handling and transport activities usually occurs in conjunction with missile assembly and transport related to test events. Amounts of hazardous materials are typically not large, especially compared to the large amounts of fuel and hazardous materials used on a daily basis by the Military Services.	Several times per year	Enough seedant for two missiles at a time	Once per year	Several times per year	Approximately 20 per year
<b>Applicable Regulations</b>	NEPA, CERCLA, RCRA, CWA, CAA, HMTA and other applicable Federal and state regulations, DoD and Military Service requirements, and industry standards.	Same	Same	Same	Same	Same
<b>Applicable SOPs</b>	Installation specific, but most are consistent among installations, because of proscriptive nature of Federal and state regulations.	Same	Same	Same	Same	Same
<b>Timing and Context</b>	MDA use, transport, and disposal are mostly in conjunction with test activities. Maintenance activities regularly occur per maintenance schedules or when situations require attention. Office products (e.g., printer toner) and cleaning products used every day.	Same	Same	Same	Same	Same
<b>Extraordinary Circumstances</b>	The large-scale movement of hazardous materials or generation of hazardous waste is unlikely, but could potentially occur if an entire weapon system were to be decommissioned.	Same	Same	Same	Same	Same
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these types of operations.	No significant environmental impacts were observed as documented in mitigation monitoring reports.	No adverse environmental impacts resulting from hazardous material handling and transport have been recorded during these operations.	No adverse environmental impacts resulting from hazardous material handling and transport have been recorded during these operations.	No adverse environmental impacts resulting from hazardous material handling and transport have been recorded during these operations.	No adverse environmental impacts resulting from hazardous material handling and transport have been recorded during these operations.

**B-11. Routine movement of mobile test assets (such as ships, aircraft, mobile sensors, telemetry, etc.) for routine missile defense test and evaluation, for repair, overhaul or maintenance, or for home port reassignments where no new support facilities are required.**

Routine movement of mobile test assets, including but not limited to ships, aircraft, mobile sensors, and telemetry, were determined to have no potential for significant environmental impacts. Movements of these types of Agency assets are usual and customary activities conducted at all host installations, ranges, commercial locations, and military/commercial ports following standard operating procedures and in accordance with appropriate laws and regulations.

A review of the mission and operational activities conducted by the Services and components indicated nearly all operate mobile assets and realign those assets in a similar manner and environment as does MDA. However, the frequency and intensity of MDA's activities are significantly lower than that of the Services and components. In addition, this CATEX is supported by long-standing use of similar CATEXs by other Federal agencies. The Team determined the characteristics of the activities at MDA were no different than those performed by the Military Services in general, as well as specifically related to the environment.

MDA's sea-based assets are home ported/docked at either Naval Bases or commercial ports. They are operated using Executing Agents from the US Navy and they follow the same SOPs, regulations, and Navy operating instructions as Navy ships;

MDA's air-based assets are based at USAF airfields or commercial airports, but abide by the same regulations and requirements as the Services at installations where they are deployed for test events. MDA has used the Services CATEXs for these particular activities without significant impacts to the environment. The military/commercial locations where MDA has its home porting/basing activities manage similar activities to those conducted by MDA, only at a larger scale, and the Services do so in a greater variety of natural environments.

Where reassignment home porting/basing is involved, the Team specifically limited this CATEX to existing operational facilities (e.g., Naval Base, Air Force Base, Army Garrison, commercial airport, or port) that have the capacity to accommodate such assets (e.g. Sea-Based X-Band (SBX) Radar Vessel, MLP, air-borne sensor systems, etc.) or where changes to supporting infrastructure would be minor. These limitations were applied to ensure there would be no potential for significant environmental impacts contemplated by the application of this CATEX.

Based on this analysis, the Team determined the activities contained in this CATEX should be, absent extraordinary circumstances, excluded from further analysis and documentation in an EA or EIS.

As documented in Table B-11.1 and B-11.2, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context,

extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;
- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;
- 4) Extraordinary circumstances associated with its application are absent; and
- 5) No known significant impacts are associated with this proposed activity, beyond those resulting from accidental fuel spills during fueling activities, which are unplanned actions. Potential impacts are mitigated using spill containment equipment and SOPs.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusion and Administrative Record**

#### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(11) Routine movement of mobile assets (such as ships and aircraft) for homeport reassignments, for repair/overhaul, or to train/perform as operational groups where no new support facilities are required.

#### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.31. Relocating a small number of aircraft to an installation with similar aircraft that does not result in a significant increase of total flying hours or the total number of aircraft operations, a change in flight tracks, or an increase in permanent personnel or logistics support requirements at the receiving installation. Repetitive use of this CATEX at an installation requires further analysis to determine there are not cumulative impacts. The EPF must document application of this CATEX on AF Form 813.

#### **U.S. Coast Guard**

**Reference:** *COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions*

4. Operational Actions a. Realignment or initial home porting of mobile assets, including vessels and aircraft, to existing operational facilities that have the capacity to accommodate such assets or where supporting infrastructure changes will be minor in nature to perform as new home ports or for repair and overhaul. Note: If the realignment or home porting would result in more than a one for one replacement of assets at an

existing facility, then the checklist required for this CATEX must specifically address whether such an increase in assets could trigger the potential for significant impacts to protected species or habitats before use of the CATEX can be approved. (Checklist and CED required).

### **Missile Defense Agency Environmental Reviews**

**Reference:** *Missile Defense Agency Mobile Launch Platform (MLP) Environmental Assessment, June 2004, resulting in a FONSI*

The EA analyzed the use of the existing MLP to provide a mobile sea-based platform from which to test sensors (radars, telemetry, and optical systems), ballistic missile targets, and defensive missile interceptors in support of MDA's mission. The MLP is the former USS Tripoli (LPH 10), a converted U.S. Navy Iwo Jima Class Amphibious Assault Ship (Helicopter).

The MLP has no engines for propulsion and would be towed from port to the test event location. Either a government-owned contractor-operated or commercial tug would tow the MLP from its home port (Mare Island, CA) to specific locations for test events. Post-launch activities would include transporting the MLP from the test event location to the ordnance loading port or home port as appropriate.

Nine broad areas of environmental consideration were considered for assessing potential impacts. Because the proposed action involves the use of the MLP as a mobile sea-based platform for testing sensors and launching target and interceptor missiles, the majority of potential impacts would occur in the ocean. MDA determined that no significant impacts to the environment or surrounding populations would occur.

The MLP has been used two to five missions per year since 2005 and no environmental impacts have been observed.

**Reference:** *Mobile Sensors Environmental Assessment, September 2005, resulting in a FONSI*

This EA analyzed the use of land-based mobile sensors and airborne sensor systems (i.e., optical and infrared systems) to provide comprehensive and realistic test surveillance and tracking data capabilities in support of the MDA Ballistic Missile Defense System (BMDS).

The proposed airborne sensor systems would be housed in a modified Gulfstream IIB aircraft and a modified DC-10 aircraft. Activities associated with the airborne sensor systems included among other things flying the airborne sensor systems to test support locations; setting up, checking out and performing maintenance on aircraft; flying airborne sensor systems from staging locations and test support locations back to bed down locations.

Airborne sensors could use the following bed down locations: Jones Riverside Airport, Tulsa, OK; Majors Army Air Field, Greenville, TX; Edwards AFB, CA; and Kirtland AFB, NM. Staging locations could be any number of airports and AFBs and test locations included airspace over Broad Ocean Area (BOA), airspace over land portions of ranges and airspace over ocean portion of ranges.

Land-based mobile sensors would be used up to 10 times per year at various locations. Activities associated with using land-based mobile sensors include transporting the sensor to the test site, site preparation activities, and checking out sensors, disassembling the sensor and transporting the sensor back to the storage or bed down location.

Thirteen broad areas of environmental consideration were considered for assessing potential impacts and MDA determined that no significant impacts would occur as a result of routine movements of test assets.

MDA has conducted numerous test activities using airborne and land-based mobile sensors and no environmental impacts have been reported or observed.

**Reference:** *Ground-Based Midcourse Defense Sea-Based X-Band Radar (SBX) Placement and Operation Environmental Assessment, October 2005, resulting in a FONSI*

The EA analyzed the operation, permanent mooring and temporary anchoring of the SBX vessel at several locations in Alaska.

Thirteen broad areas of environmental consideration were considered for assessing potential impacts and MDA determined that no significant impacts would occur as a result of supporting, position/secure and operating the SBX.

No adverse environmental impacts have been observed due to the deployment and operation of the SBX since its initial deployment and operation.

**Reference:** *RCE Integrated Flight Test #10, January 2002. Qualifies for Navy CATEX (f)(11).*

The proposed action among other things was to use a Navy Ticonderoga Class Aegis Cruiser with sensors aboard to detect, track and collect data on the target during IFT-10. The Navy ship would perform routine operations and would conform to standard fleet operating procedures. Also, the airborne laser aircraft, a modified 747 aircraft, would use the IFT-10 missile as a target of opportunity.

**Reference:** *RCE Integrated Flight Test #9, August 2002. Qualifies for Navy CATEX (f) (11).*

The proposed action among other things was to use a Navy Ticonderoga Class Aegis Cruiser with sensors aboard to detect, track and collect data on the target during IFT-9.

The Navy ship would perform routine operations and would conform to standard fleet operating procedures.

**Reference: *RCE Integrated Flight Tests #13A and #13B, August 2003. Qualifies for Navy CATEX (f) (11).***

The proposed action among other things was to use a Navy AEGIS CG47 Class Aegis Cruiser with sensors aboard to detect, track and collect data on the launches. The Navy ship would perform routine operations and would conform to standard fleet operating procedures. Also, the airborne laser aircraft, a modified 747 aircraft, would use the IFT #13A and #13B missiles as targets of opportunity.

**Reference: *RCE Integrated Flight Test-13C (IFT 13C), February 2004. Qualifies for Navy CATEX (f) (11).***

The proposed action among other things was to use a Navy Ticonderoga Class Aegis Cruiser with sensors aboard to detect, track and collect data on the target during IFT-13C. The Navy ship would perform routine operations and would conform to standard fleet operating procedures. Also, the airborne laser aircraft, a modified 747 aircraft, would use the IFT-13C missile as a target of opportunity.

**Reference: *RCE Integrated Flight Test-14 (IFT-14), July 2004. Qualifies for Navy CATEX (f) (11).***

The proposed action among other things was to use a Navy Ticonderoga Class Aegis Cruiser with sensors aboard to detect, track and collect data on the target during IFT-14. The Navy ship would perform routine operations and would conform to standard fleet operating procedures. Also, the airborne laser aircraft, a modified 747 aircraft, would use the IFT-14 missile as a target of opportunity.

**Reference: *RCE Operation and Maintenance of the MV Pacific Collector (PC) and MV Pacific Tracker (PT) to Support MDA Requirements as Sea-Based Mobile Sensor Platforms, July 2009. Qualifies for Navy CATEX (f)(11).***

The PC and PT are mobile sea-based platforms designed to host sensors. The proposed action is for Maritime Administration (MARAD), as MDA's executing agent, to modify, operate, and maintain the PC and PT to host MDA sensors to track BMDS test interceptors and/or target missiles launched from any of the test ranges (Reagan Test Site, Kodiak Launch Complex, Vandenberg AFB, PMRF, Western Range, and Wake Island and land-based instrumentation sites) as well as the broad ocean area using either air- or sea-launch platforms. Both vessels would be homeported at the Cascade General Portland Shipyard, Portland, OR.

**Table B-11.1 Comparative Analysis of MDA CATEX B-11 to Other Agency CATEXs.**

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Navy</b>	<b>U.S. Air Force</b>	<b>U.S. Coast Guard</b>	<b>Notes</b>
<b>Applicable CATEXs</b>	B-11	(f)(11)	A2.3.31	<i>COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions</i>	
<b>Characteristics of the Action</b>	Routine movement of mobile test assets (such as ships, aircraft, mobile sensors, telemetry, etc.) for routine missile defense test and evaluation, for repair/overhaul or maintenance, or for home port reassignments where no new support facilities are required.	Proposed action is limited to routine movement of mobile assets (such as ships and aircraft) for homeport reassignments, for repair/overhaul, or to train/perform as operational groups where no new support facilities are required.  MDA has extensive experience working at U.S. Navy installations such as PMRF, HI; Point Mugu Sea Range, CA; San Nicolas Island, CA; and Dahlgren Naval Base, VA.	Proposed action is limited to relocating a small number of aircraft to an installation with similar aircraft that does not result in a significant increase of total flying hours or the total number of aircraft operations, a change in flight tracks, or an increase in permanent personnel or logistics support requirements at the receiving installation. Repetitive use of this CATEX at an installation requires further analysis to determine there are not cumulative impacts.  MDA has extensive experience working at U.S. Air Force Installations such as Vandenberg AFB, CA; Edwards AFB, CA; Wake Island; Clear AFS, AK; Elmendorf AFB, AK; Eareckson AFS, AK; and Schriever AFB, CO.	Proposed action is limited to realignment or initial home porting of mobile assets, including vessels and aircraft, to existing operational facilities that have the capacity to accommodate such assets or where supporting infrastructure changes will be minor in nature to perform as new home ports or for repair and overhaul. Note: If the realignment or home porting would result in more than a one for one replacement of assets at an existing facility, then the checklist required for this CATEX must specifically address whether such an increase in assets could trigger the potential for significant impacts to protected species or habitats before use of the CATEX can be approved.	
<b>Methods of Implementing the Action</b>	Work with Military Services to find suitable locations for porting/basing/staging or repair/maintenance activities.  Work with host installation or commercial port/airport to identify applicable laws, regulations, and SOPs.  Work with host installation or commercial port/airport to either review existing and/or prepare necessary NEPA documentation.  Work with host installation or commercial airport/port to obtain any required support structures, equipment, or minor site preparation activities.  Deploy mobile assets to site and ensure repair and maintenance operations conform to facility operation and environmental management plans.	Installation staff to find suitable locations for porting/basing or repair/maintenance activities.  Installation staff to identify applicable laws, regulations, and SOPs.  Installation staff either review existing and/or prepare necessary NEPA documentation.  Installation staff obtains any required support structures, equipment, or minor site preparation activities.  Deploy mobile assets to site and ensure repair and maintenance operations conform to facility operation and environmental management plans.	Same	Same	
<b>Frequency of the Actions</b>	Movement of MDA assets occurs infrequently at any one site; however, they occur routinely at locations used by MDA.	Navy movement of sea-based assets and aircraft occurs much more frequently.	Air Force movement of aircraft, sensors and other assets occurs much more frequently.	Coast Guard movement of sea-based assets and aircraft occurs much more frequently.	Typical operations subject to conditions of host installation or commercial airport/port's regulatory permits and master schedule.
<b>Applicable Regulations</b>	NEPA, CAA, RCRA, and applicable state regulations.	Same	Same	Same	
<b>Applicable SOPs</b>	Installation/Manufacturer specific	Same	Same	Same	
<b>Timing and Context</b>	Movement of assets is conducted several days or weeks before test events and then returned to home port or base several days after the test event. Delivery of a new test asset or decommissioning of an existing test asset occurs very infrequently.	Same for testing and missions, but more frequent.	Same for testing and missions, but more frequent.	Same for testing and missions, but more frequent.	
<b>Extraordinary Circumstances</b>	None	Same	Same	Same	

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Navy</b>	<b>U.S. Air Force</b>	<b>U.S. Coast Guard</b>	<b>Notes</b>
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from movement of these assets.	Same	Same	Same	

**Table B-11.2 Comparative Analysis of MDA CATEX B-11 to MDA Environmental Analyses.**

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>Mobile Launch Platform (MLP) Environmental Assessment, June 2004, FONSI Signed</b>	<b>Mobile Sensors Environmental Assessment, September 2005, FONSI Signed</b>	<b>Ground-Based Midcourse Defense Sea-Based X-Band Radar (SBX) Placement and Operation Environmental Assessment, October 2005, FONSI Signed</b>
<b>Applicable CATEXs</b>	B-11			
<b>Characteristics of the Action</b>	Routine movement of mobile test assets (such as ships, aircraft, mobile sensors, telemetry, etc.) for routine missile defense test and evaluation, for repair/overhaul or maintenance, or for home port reassignments where no new support facilities are required.	<p>The EA analyzed the use of the existing MLP to provide a mobile sea-based platform from which to test sensors (radars, telemetry, and optical systems), ballistic missile targets, and defensive missile interceptors in support of MDA's mission. The MLP is the former USS Tripoli (LPH 10), a converted U.S. Navy Iwo Jima Class Amphibious Assault Ship (Helicopter).</p> <p>The MLP has no engines for propulsion and would be towed from port to the test event location. Either a government-owned contractor-operated or commercial tug would tow the MLP from its home port (Mare Island, CA) to specific locations for test events. Post-launch activities would include transporting the MLP from the test event location to the ordnance loading port or home port as appropriate.</p>	<p>This EA analyzed the use of land-based mobile sensors and airborne sensor systems (i.e., optical and infrared systems) to provide comprehensive and realistic test surveillance and tracking data capabilities in support of the MDA BMDS.</p> <p>The proposed airborne sensor systems would be housed in a modified Gulfstream IIB aircraft and a modified DC-10 aircraft. Activities associated with the airborne sensor systems included among other things flying the airborne sensor systems to test support locations; setting up, checking out and performing maintenance on aircraft; flying airborne sensor systems from staging locations and test support locations back to bed down locations.</p> <p>Airborne sensors could use the following bed down locations: Jones Riverside Airport, Tulsa, OK; Majors Army Air Field, Greenville, TX; Edwards AFB, CA; and Kirtland AFB, NM. Staging locations could be any number of airports and AFBs and test locations included airspace over Broad Ocean Area (BOA), airspace over land portions of ranges and airspace over ocean portion of ranges.</p> <p>Land-based mobile sensors would be used up to 10 times per year at various locations. Activities associated with using land-based mobile sensors include transporting the sensor to the test site, site preparation activities, and checking out sensors, disassembling the sensor and transporting the sensor back to the storage or bed down location.</p>	The EA analyzed the operation, permanent mooring and temporary anchoring of the SBX vessel at several locations in Alaska.
<b>Methods of Implementing the Action</b>	<p>Work with Military Services to find suitable locations for porting/basing or repair/maintenance activities.</p> <p>Work with host installation or commercial port/airport to identify applicable laws, regulations, and SOPs.</p> <p>Work with host installation or commercial port/airport to either review existing and/or prepare necessary NEPA documentation.</p> <p>Work with host installation or commercial airport/port to obtain any required support structures, equipment, or minor site preparation activities.</p> <p>Deploy mobile assets to site and ensure repair and maintenance operations conform to facility operation and environmental management plans.</p>	Same	Same	Same
<b>Frequency of the Actions</b>	Movement of MDA assets occurs infrequently at any one site; however, they occur continuously at locations used by MDA.	Up to four tests per year potentially requiring movement of assets.	Four or more flights per year for tests and movement of assets.	One time home porting and infrequent transit to broad ocean areas.
<b>Applicable Regulations</b>	NEPA, CAA, RCRA, and applicable State Regulations.	Same	Same	Same
<b>Applicable SOPs</b>	Installation/Manufacturer specific	Same	Same	Same

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>Mobile Launch Platform (MLP) Environmental Assessment, June 2004, FONSI Signed</b>	<b>Mobile Sensors Environmental Assessment, September 2005, FONSI Signed</b>	<b>Ground-Based Midcourse Defense Sea-Based X-Band Radar (SBX) Placement and Operation Environmental Assessment, October 2005, FONSI Signed</b>
<b>Applicable CATEXs</b>	B-11			
<b>Timing and Context</b>	Movement of assets is conducted several days or weeks before test events and then returned to home port or base several days after the test event. Delivery of a new test asset or decommissioning of an existing test asset occurs very infrequently.	Same	Same	Same
<b>Extraordinary Circumstances</b>	None.	Same	Same	Same
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from movement of these kinds of assets.	The MLP has been used two to five missions per year since 2005 and no significant environmental impacts have been observed.	MDA has conducted numerous test activities using airborne sensors and no environmental impacts have been reported or observed.	No adverse environmental impacts have been observed due to the deployment of the SBX.

**B-12. Activities and operations to be conducted in an existing non-historic structure which are within the scope of and are compatible with the present functional use of the building, will not result in a substantial increase in waste discharged to the environment, will not result in substantially different waste discharges from current or previous activities, and emissions will remain within established permit limits, if any.**

Activities contemplated by this CATEX are those undertaken within structures in a manner compliant with established Federal, state, local, and DoD requirements to protect public safety and the quality of the human environment. Examples of structures contemplated include office buildings, data centers, warehouses, launch facilities, telemetry/radar sites, etc. The Team found that such actions are performed in structures by MDA on many Host installations or ranges, or commercial sites without any harm to the quality of the human environment. Because MDA does not own real property, it typically uses existing structures at Host installations, ranges, or commercial developments, some of which may also require minor modifications (major renovation and construction of new facilities are activities not contemplated in this CATEX). MDA actions are no different in character and scope than those conducted by the Military Services on the same installations. The methods of implementing the actions and the requirements governing them are also the same on host installations and at commercial sites because MDA must comply with the host installation's environmental and cultural resources management programs in addition to Federal, state, and local requirements. The frequency and timing of these activities also does not differ significantly from the Host installation's actions.

Wastes and air emissions from MDA activities on Host installations or commercial sites are subject to the same controls as the Host installation's activities and Federal, state and local regulations and requirements. Demolition of structures is not covered by this CATEX.

Adverse environmental impacts would not occur because:

- 1) The structure would not be historic;
- 2) The proposed activities would be consistent with the activities of previously and/or currently conducted at that location;
- 3) No change in the type of wastes and emissions generated would occur; and
- 4) No significant increase in the quantity of wastes and emissions under this CATEX would be allowed.

The Team specifically limited this CATEX to actions conducted in an existing structure compatible with and similar in scope to the ongoing functional uses of those structures and consistent with previously established safety levels and in compliance with Federal, state, tribal, and local requirements to protect the environment. This was done to ensure there would be no potential for significant environmental impacts contemplated by the application of this CATEX.

In addition, this CATEX is supported by environmental reviews and administrative records from MDA projects.

As documented in Table B-12.1 and B-12.2, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations'

CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;
- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;
- 4) Extraordinary circumstances associated with its application are absent; and
- 5) No known significant impacts are associated with this proposed activity.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusion and Administrative Record**

#### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(b)(4) Proposed activities and operations to be conducted in an existing non-historic structure which are within the scope and compatibility of the present functional use of the building, will not result in a substantial increase in waste discharged to the environment, will not result in substantially different waste discharges from current or previous activities, and emissions will remain within established permit limits, if any (REC required).

#### **Federal Emergency Management Agency**

**Reference:** *44 CFR 10.8 (d) (2)*

(xvii) Actions conducted within enclosed facilities where all airborne emissions, waterborne effluent, external radiation levels, outdoor noise, and solid and bulk waste disposal practices comply with existing Federal, state, and local laws and regulations.

#### **Missile Defense Agency Environmental Reviews**

**Reference:** *Ground-Based Midcourse Defense (GMD) Initial Defensive Operations Capability (IDOC) at Vandenberg Air Force Base Environmental Assessment, August 2003, resulting in a FONSI*

The EA analyzed the environmental impacts resulting from the use and/or modification of four existing missile silos and other support facilities at Vandenberg AFB as part of the GMD IDOC.

Existing facilities would be required for the following functions: Missile Assembly/EKV/Interceptor Integration, Security Response Force Outpost, Readiness Station, GMD Fire Control/Communication components (IDT, GMD Communication Node, and GMD Fire Control), interceptor storage, administrative/office space, Peculiar Support Equipment (IDOC-associated equipment such as the “strongback” trailer used for transport) storage, EKV fuel tank storage, EKV oxidizer tank storage, and warehouse/maintenance/storage facilities. Several of these facilities would require interior modifications and the installation of additional infrastructure (i.e., security fencing, lighting, communications lines, water line upgrades, re-grading for proper storm drainage, septic tank and leach field, etc.).

Thirteen broad areas of environmental consideration were considered for assessing potential impacts and MDA determined that no significant impacts would occur from implementing the proposed activities for the IDOC at Vandenberg AFB as long as the noted mitigation actions were implemented. No adverse environmental effects were reported or observed from launch facility reactivation and support facility modifications.

**Reference:** *New Mission Beddown and Construction, Clear Air Force Station (AFS), Alaska Environmental Assessment, August 2012, resulting in a FONSI*

The purpose of the proposed action was to upgrade the Clear AFS Early Warning Radar (EWR) to add capabilities for search, acquisition, object classification and tracking.

Computer system upgrades and internal facility modifications would occur inside the Radar Facility to accommodate new equipment.

The environmental analysis shows that no significant impacts would occur from the system upgrade and facility modification activities associated with the Proposed Action. Construction is planned for 2013.

**Reference:** *REC Booster Vehicle (BV) Assembly Operations at Lockheed Martin Facilities, Courtland, AL, July 2002. Qualifies for Army CATEX (b)(4).*

The proposed action was to assemble and test booster stages of the GBI missile at Lockheed Martin Space Systems Company facilities in Courtland, AL. These activities were in the scope and compatibility of the present functional use of the building with no substantial increases in waste discharges.

**Reference:** *REC Kinetic Energy Interceptor Program – Stage-2 Rocket Motor Manufacture and Static Fire Tests at the Alliant Techsystems, Inc. (ATK) Elkton Facility, Maryland, November 2006. Qualifies for Army CATEX (B)(4).*

ATK would manufacture and static fire test up to four Kinetic Energy Interceptor (KEI) Stage-2 rocket motors at its existing contractor facilities in Maryland. The ATK-Elkton facility has been manufacturing and testing solid rocket motors since 1948.

**Reference: *REC Kinetic Energy Interceptor Program – Stage-1 Rocket Motor Manufacture and Static Fire Tests at Alliant Tech Launch Systems (ATK) Clearfield Facility, Utah, July 2006. Qualifies for Army CATEX (b)(4) and Navy.***

ATK would manufacture and static fire test up to five KEI Stage-1 rocket motors at its existing contractor facilities in Utah. The Bacchus Facility has been manufacturing solid rocket motors since 1958 for various DoD and commercial programs.

**Reference: *REC Radiation Testing of Microsatellite Components, May 2007. Qualifies for Army CATEX (b)(4).***

Proton testing of commercial-off-the-shelf (COTS) microsatellite components used by MDA's Distributed Sensing Experiment (DSE) program would be conducted at the Indiana University Cyclotron Facility in Bloomington, Indiana to evaluate the performance of COTS components under a space radiation environment. During testing, each component will be irradiated with 200 Mega Electron Volt (MeV) protons and monitored to identify the sensitivity of microsatellite components to radiation at levels that simulate the environment in space. A total of four tests are planned.

**Table B-12.1 Comparative Analysis of MDA CATEX B-12 to Other Agency CATEXs**

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>Federal Emergency Management Agency</b>	<b>Notes</b>
<b>Applicable CATEXs</b>	B-12	(b)(4)	44 CFR 10.8 (d) (2)	
<b>Characteristics of the Action</b>	Activities and operations to be conducted in an existing non-historic structure which are within the scope of and are compatible with the present functional use of the building, will not result in a substantial increase in waste discharged to the environment, will not result in substantially different waste discharges from current or previous activities. Does not include major renovations or new construction.	Proposed action is limited to operations conducted in an existing non-historic structure which are within the scope and compatibility of the present functional use of the building, will not result in a substantial increase in waste discharged to the environment, will not result in substantially different waste discharges from current or previous activities, and emissions will remain within established permit limits, if any (REC required).  MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, USAKA; WSMR, NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.	Proposed action is limited to actions conducted within enclosed facilities where all airborne emissions, waterborne effluent, external radiation levels, outdoor noise, and solid and bulk waste disposal practices comply with existing Federal, state, and local laws and regulations.	
<b>Methods of Implementing the Action</b>	Work with host installation or property owner to identify applicable laws, regulations, management plans and SOPs.  Work with host installation or property owner to obtain required permits and to record and report resource and material usage and disposal.  Work with host installation or property owner to either review existing documentation and/or prepare necessary NEPA documentation.  Work with host installation property owner to conduct any required coordination with Federal and state agencies.	Installation staff to identify applicable laws, regulations, management plans, SOPs.  Installation staff to obtain required permits and record and report resource and material usage and disposal.  Installation staff to either review existing documentation and/or prepare necessary NEPA documentation.  Conduct any required coordination with Federal and state agencies.	Similar	All these activities are conducted according to detailed regulations that are fundamentally consistent across Federal agencies. Differences in state regulations could occur.
<b>Frequency of the Actions</b>	Relatively infrequent compared to Military Service actions at locations used by MDA; MDA's small footprint occasionally changes to accommodate new research development, test programs or operational requirements as the BMDS continues to spirally evolve.	Greater	Greater	Typical range operations subject to conditions of installation's regulatory permits and management plans.
<b>Applicable Regulations</b>	NEPA, CERCLA, RCRA, CWA, CAA, and other applicable Federal and state regulations, DoD and Military Service requirements, local ordinances, and industry standards.	Same	Same	
<b>Applicable SOPs</b>	Installation specific, but most are consistent among installations, because of proscriptive nature of Federal and state regulations.	Same	Same	
<b>Timing and Context</b>	Leasing/use of new space occurs infrequently and is tied to the research, development, testing of a new system/program or operational requirements. MDA use, transport, and disposal activities correspond to the infrequent change in MDA's foot print and/or MDA's test activities.	Continuous over time at high levels relative to MDA.	Continuous over time at high levels relative to MDA.	
<b>Extraordinary Circumstances</b>	None	Same	Same	
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these types of operations.	Same	Same	

**Table B-12.2 Comparative Analysis of MDA CATEX B-12 to MDA Environmental Analyses.**

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>Ground-Based Midcourse Defense (GMD) Initial Defensive Operations Capability (IDOC) at Vandenberg Air Force Base Environmental Assessment, August 2003, FONSI Signed</b>	<b>New Mission Beddown and Construction, Clear Air Force Station (AFS), Alaska Environmental Assessment, August, 2012, FONSI Signed</b>
<b>Applicable CATEXs</b>	B-12		
<b>Characteristics of the Action</b>	Activities and operations to be conducted in an existing non-historic structure which are within the scope of and are compatible with the present functional use of the building, will not result in a substantial increase in waste discharged to the environment, will not result in substantially different waste discharges from current or previous activities. Does not include major renovations or new construction.	The Proposed Action would use and/or modify four existing missile silos and other supporting facilities at Vandenberg AFB as part of the GMD IDOC.	The purpose of the proposed action was to upgrade the Clear AFS EWR to add capabilities for search, acquisition, object classification and tracking. The proposed action among other things is to upgrade the EWR, GFC/C and GMD SSF Equipment within or adjacent to the Radar Facility. Equipment would be installed in the Radar Facility and on the roof. Internal facility modifications would occur inside the Radar Facility to accommodate new equipment.
<b>Methods of Implementing the Action</b>	<p>Work with host installation or property owner to identify applicable laws, regulations, management plans and SOPs.</p> <p>Work with host installation or property owner to obtain required permits and to record and report resource and material usage and disposal.</p> <p>Work with host installation or property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation property owner to conduct any required coordination with Federal and state agencies.</p>	Same	Same
<b>Frequency of the Actions</b>	Relatively infrequent compared to Military Service actions at locations used by MDA; MDA's small footprint occasionally changes to accommodate new research development, test programs or operational requirements as the BMDS continues to spirally evolve.	One time – completed	One time
<b>Applicable Regulations</b>	NEPA, CERCLA, RCRA, CWA, CAA, and other applicable Federal and state regulations, DoD and Military Service requirements, local ordinances, and industry standards.	Same	Same
<b>Applicable SOPs</b>	Installation specific, but most are consistent among installations, because of proscriptive nature of Federal and state regulations.	Same	Same
<b>Timing and Context</b>	Leasing/use of new space occurs infrequently and is tied to the research, development, testing of a new system/program or operational requirements. MDA use, transport, and disposal activities correspond to the infrequent change in MDA's foot print and/or MDA's test activities.	Same	Same
<b>Extraordinary Circumstances</b>	None	Same	Same
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these types of operations.	No adverse environmental effects have been observed from silo reactivation and supporting facility modification since project construction.	Facility modifications have not begun.

**B-13. Acquisition, installation, modification, routine repair and replacement, and operation of utility (e.g., water, sewer, and electrical) and communication systems, mobile antennas, data processing cable, and similar electronic equipment that use existing rights-of-way, easements, distribution systems, facilities, or previously disturbed land. (REC required).**

Activities contemplated by this CATEX are those undertaken within or near existing structures and facilities or along roads with existing rights-of ways or easements in a manner compliant with established Federal, state, local, and DoD requirements to protect public safety and the quality of the human environment. The Team limited the scope of the activities contemplated by this CATEX to using existing rights-of-way, easements, utility distribution systems, facilities and/or previously disturbed land. These existing rights-of-way, easements, utility distribution systems, and facilities would include properties having already been disturbed by prior installation of utility and communications systems. Due to this prior disturbance, there would be little potential for significant environmental impact from the use of these properties. The Team realized that minor trenching for utilities could be required, but believed, based on our experience at host installations and test ranges, trenching (<3 feet deep) would be limited to existing easements and previously disturbed areas. By confining trenching to previously disturbed areas, existing easements and shallow depths, we are minimizing the potential impact to sensitive environments, cultural/historical/biological resources (i.e., less likely to run into a cultural, historical or biological resource if the area was either in an existing easement or already disturbed and the depth of the trenching was <3 feet).

The Team recognized this CATEX could involve actions with one or more extraordinary circumstances (i.e., would adversely affect public health or safety; threatens a violation of Federal, state or local environmental laws applicable to MDA; or involves a site that includes wetlands not covered by a nation-wide or regional permit, endangered or threatened species, historical or archeological resources or hazardous wastes, etc.). Therefore, to ensure only those actions having negligible impacts on the human environment are contemplated, the Team proposed a REC be prepared to document no extraordinary circumstances exist and all CATEX-screening criteria are met or whether further NEPA analysis is required.

As documented in Table B-13.1 and B-13.2, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;
- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;

- 4) Extraordinary circumstances associated with its application absent and documented by a REC; and
- 5) No known significant impacts are associated with this proposed activity, beyond those resulting from accidental fuel spills during fueling activities, which are unplanned actions. Potential impacts are mitigated using spill containment equipment and SOPs.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusion and Administrative Record**

#### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(e)(2) Acquisition, installation, and operation of utility and communication systems, mobile antennas, data processing cable and similar electronic equipment that use existing right-of-way, easement, distribution systems, and/or facilities (REC required).

#### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(36) Acquisition, installation, and operation of utility (e.g., water, sewer, electrical) and communication systems (e.g., data processing cable and similar electronic equipment) which use existing rights of way, easements, distribution systems, and/or facilities.

#### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.12. Installing, operating, modifying, and routinely repairing and replacing utility and communications systems, data processing cable, and similar electronic equipment that use existing rights of way, easements, distribution systems, or facilities.

#### **Federal Emergency Management Agency**

**Reference:** *44 CFR 10.8 (d) (2)*

(ix) Acquisition, installation, or operation of utility and communication systems that use existing distribution systems or facilities, or currently used infrastructure rights-of-way.

#### **Department of Energy**

**Reference:** *10 CFR 1021, Subpart D, Appendix B*

B1.7 Acquisition, installation, operation, and removal of communication systems, data processing equipment, and similar electronic equipment.

B1.19 Siting, construction, and operation of microwave and radio communication towers and associated facilities, if the towers and associated facilities would not be in an area of great visual value.

B4.7 Adding fiber optic cable to transmission structures or burying fiber optic cable in existing transmission line rights-of-way.

### **Missile Defense Agency Environmental Reviews**

**Reference:** *National Missile Defense (NMD) Deployment Environmental Impact Statement, July 2000*

This EIS analyzed among other things, the installation of a communication line between NMD elements. A fiber optic cable line may be required for potential deployment in Alaska and North Dakota. In Alaska, the land portion of fiber optic cable would be laid in Interior Alaska to connect potential NMD elements in central Alaska. In North Dakota, the cable would be laid in the ground. To the extent possible, the fiber optic cable line route would follow existing road, utility, or rail corridors. The laying of fiber optic cable for the NMD program would be performed by a commercial fiber optic cable installation company per regional guidelines.

Fifteen broad areas of environmental consideration were considered for assessing potential impacts and MDA determined that no significant impacts would occur from implementing the proposed activities. No adverse environmental effects have been observed from installing any utility work.

**Reference:** *Ground-Based Midcourse Defense (GMD) Validation of Operational Concept (VOC) Environmental Assessment, March 2002, resulting in a FONSI*

For the GMD VOC test site components for GBI, the Fiber Optic Cable (FOC) network would provide the communications link between the components and sub-components of the GMD test sites. Existing FOC would be used whenever feasible. Where new FOC was required, cable may be installed on either side of rights-of-way (normally roads or railroad tracks). The FOC would be buried to a depth of approximately 3 feet. To the extent possible, candidate cable routes were identified along existing rights-of-way, minimizing the impact on the environment.

The EA determined the implementation of the proposed action would not result in significant impacts to any of the resource areas analyzed.

Additional activities were determined necessary for Eareckson AFS and Beale AFB in December 2002. For Eareckson AFS these actions included among other things minor realignments of the FOC routes along existing rights-of-way and previously disturbed areas, and installation of a cable run between buildings. No new environmental impacts were identified with these activities and no additional analysis was required in the existing EA.

At Beale AFB, trenching and installation of FOC would occur from the base boundary for approximately 2.3 miles. This new segment would connect to an existing fiber optic conduit on base. The FOC would be installed in the existing right-of-way along the east shoulder of the road. There were no new environmental impacts identified with these activities and no new environmental analyses were found to be necessary. Therefore, the activities were determined to be categorically excluded by the USAF through their environmental impact analysis process.

Off-base of Beale AFB, additional trenching and installation of FOC would occur from an existing communication line along Ostrum Road to Beale AFB, approximately 4.2 miles. This cable would be installed in the right-of-way along the road shoulder and connect to the cable previously mentioned on South Beale Road. No new environmental impacts were identified with these activities and no additional analysis was required in this EA.

No adverse environmental effects were reported or observed from installation of the utility and communications lines.

**Reference: *Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Environmental Impact Statement, July 2003***

Portions of the proposed actions included: Three fiber optic administrative telephone circuits for voice communications and alarm monitoring. Power and FOC would be routed in existing right of ways where practicable.

For communication among the components on the same installation, the ETR would maximize use of available communications assets, including cable. If communication cable is not available, new cable would be installed. Installation of new cable would be in existing conduit, if available. If not, new conduit would be constructed along rights-of-way. New conduit would be buried at a depth of approximately 3 feet, where necessary.

No significant environmental impacts or cumulative impacts on resource areas addressed for any activity considered in implementing the proposed action were found in this analysis. As appropriate, mitigation measures would be developed to address any site-specific significant impacts. No environmental impacts were observed during construction and installation of fiber optics of the GMD Communications Network.

**Reference: *Ground-Based Midcourse Defense (GMD) Initial Defensive Operations Capability (IDOC) at Vandenberg Air Force Base Environmental Assessment, August 2003, resulting in a FONSI***

The proposed action, among other things, is for communication cable(s) to be installed between support facilities and silos, as required. Cables would be installed in existing conduits, where available. If existing conduits are not available, the cable(s) would be installed in new conduits that would be placed in previously disturbed areas of soil

(usually along the shoulders of existing roads) approved by the Vandenberg AFB Environmental Management Office where possible to avoid sensitive biological and cultural areas. Also, the new communications cable/conduit would be buried parallel to existing buried utility lines if cross country routes are required. Trenching for the new communications cable/conduit would have a maximum depth of 3 feet. If new cable conduit is necessary and must be placed near known archaeological sites, the conduit would be routed under the site deposits using a directional drilling rig. In this case, the conduit would be emplaced deep enough to avoid negative impacts to the site.

Thirteen broad areas of environmental consideration were considered for assessing potential impacts and MDA determined that no significant impacts would occur from implementing the proposed activities for the IDOC at Vandenberg AFB. No adverse environmental effects have been observed from installing any utility work.

**Reference: *Relocatable In-flight Interceptor Communications System Data Terminal #2 at Vandenberg Air Force Base Supplemental Environmental Assessment (SEA), November 2007, resulting in a FONSI***

The EA analyzed the installation of a Relocatable Integrated Data Terminal (RIDT) and communications equipment, within shelters, on concrete pads; backup power generator and uninterruptable power supply; communications hut; storage facility for spares; an above ground water tank for fire suppression, with on-site distribution system; and installation of a septic system for the existing ISFAC.

Communications lines would be extended from an existing power line along El Rancho Road, including a cross connection with the existing RIDT. The lines would be placed in a buried flexible conduit, to be installed via trenching. Commercial power would be brought to the second RIDT from an existing power line along the east side of El Rancho Road. The new line would be installed by a combination of boring and trenching. A new water line with pump station would be required to provide water sufficient for fire fighting. Trenching for the water line would be required and buried power lines would be extended to the new pump station from the second RIDT site.

Based on analysis of the proposed construction and operation of a second RIDT at Vandenberg AFB, this SEA identified no significant impacts affecting the quality of the human environment. No environmental impacts have been observed as a result of MDA's construction and operation of the IDT #2 and supporting facilities at VAFB.

**Reference: *AF 813 GMD Validation of Operational Concept Testing Fiber Optic Cable (FOC) Installation at Beale AFB, February 2003. Qualifies for Air Force CATEX A2.3.12.***

The proposed action was to provide FOC connection from the Upgraded Early Warning Radar to north and south off-base spurs connecting Beale AFB's FOC network to a commercial FOC backbone through CA. On-base fiber connectivity would be a

combination of existing base fiber, new fiber installed in new conduit (trenching or boring required).

**Reference: *REC C2BMC Site Activation, April, 2004. Qualifies for Air Force CATEX A2.3.12.***

The Command, Control, Battle Management and Communications (C2BMC) suite will be deployed in facilities that provide the infrastructure and communications interfaces to other BMDS elements and external systems. The suite consists of operator stations, mission servers, network management equipment, and security and external connection equipment. All equipment would be located within existing facilities that provide communications connectivity, power, shelter, security, and other services.

**Reference: *REC Replacement of Communications Cable at Fort Greely, Alaska, May 2004. Qualifies for Army CATEX (e)2.***

The proposed action was to replace a portion of communications cable. Trenching would be conducted within the existing right-of-way/easement of the existing communications cable.

**Reference: *REC GMD Entry Control Facility Relocations at Fort Greely, AK, February 2005. Qualifies for Army CATEX (e)(2).***

The proposed action among other things was to installation of a well and a wastewater (septic) system; and installation of communication cables and utilities.

**Reference: *RCE MDA – 510, Telemetry Building at the Pacific Missile Range Facility (PMRF), Makaha Ridge, Kauai, HI, April 2005. Qualifies for Navy CATEX (36).***

The proposed action included construction of a standalone pre-engineered building at PMRF and providing water, sewer, communications and electrical utilities by utility infrastructure already present at the site. Asphalt removal and trenching along developed areas of the site would be required for the utility connections.

**Reference: *AF813 Removal of Utilities and Walls between Bays 1, 2, and 3 in Building 151 at Edwards AFB, October 2005. Qualifies for Air Force CATEX A2.3.12.***

The proposed action was to remove utilities and wall between bays 1, 2, and 3 to allow the Air Borne Laser program to proceed with future activities at this facility without unnecessary restrictions.

**Reference: *AF 813 Re-Establish Leach Field at Bldg #1768, CES W/O # 38026, July 2006. Qualifies for Air Force CATEX A2.3.12.***

The proposed action was to replace the existing septic tank and leach field. Existing tank and leach field would be abandoned in place per Santa Barbara County requirements. A new tank and leach field would be installed in an area that would cause the least impact on sensitive plant life in the area.

**Reference: *AF 813 MDA/GMD Operations at Vandenberg AFB, California – LF-24 (Bldg 1965) New Communication Lines Connection, October 2006. Qualifies for Air Force CATEX A2.3.12.***

The proposed action consisted of installation of a new buried communication line conduit at LF-24.

**Reference: *REC AN/TPY-2 Radar Deployment at the Ted Stevens Marine Research Institute (TSMRI) on the National Oceanic and Atmospheric Administration (NOAA) Site in Juneau, Alaska in Support of Flight Test Ground-Based Interceptor (FTG)-04, May 2007. Qualifies for Army CATEX (E)(2).***

The proposed action was the temporary deployment of the AN/TPY-2 Radar at the TSMRI in Juneau, AK. Actions included siting, transport, set up, calibration and operation of the Radar. Among other things considered was the installation of temporary lighting, installation of grounding and lightning protection poles approximately 25 feet tall and installation of two 6 foot satellite dishes for communications.

**Reference: *AF 813 MDA - Modification of Bldg 988 for Administration Space, March 2009. Qualifies for Air Force CATEX A2.3.12.***

The proposed action included among other things: 1) install new fire alarm system and repair existing fire suppression system, 2) repair existing heating, ventilations and air conditioning (HVAC) system, remove existing boiler, and construct new concrete equipment pads, 3) replace existing transformer and repair existing electrical panels, 3) install new communication lines and repair/upgrade communication panels, and 4) replace/upgrade of the septic tank and leach field.

**Reference: *AF 813 MDA – Satellite Communications Fiber Optic Cable Installation (SATCOM FOC), July 2010. Qualifies for Air Force CATEX A2.3.12.***

New FOC would be installed near the intersection of Washington Avenue and Airfield Road using existing conduit/ducts and handholes where possible. Installation of new underground conduits and handholes in several places will be needed via trenching and excavation. The majority of work would be 6 to 10 feet off the paved roadway.

**Reference: AF 813 Beddown of Missile Defense Agency (MDA) Mobile Telemetry system at Kaena Point Satellite Tracking Station, December, 2010. Qualifies for Air Force CATEX A2.3.12.**

The proposed action was to temporary operate a transportable telemetry antenna system in Hawaii. Among other things considered was providing fiber for transmission of up to four streams of unclassified telemetry data between HULA A and HULA B; connection to site power; installation of air-conditioning equipment; and installation of commercial long distance phone lines.

**Reference: AF 813 Air-borne Infrared Ground-based Operations at Site 460, VAFB, June 2011. Qualifies for Air Force CATEX A2.3.12.**

MDA would set up and test an Air-Borne Infrared Radar (ABIR) Data Collection system at VAFB Site 460. The system consists of: 1) Multispectral Targeting System-B ground-mounted sensor, 2) an airborne-capable computer processor enclosed in a secure shelter, and 3) an Operations Control Van to support personnel monitoring the data and equipment.

**Reference: AF 813 VAFB Re-Route Power Lines to Underground at Launch Facilities (LF-02, LF-03, LF-21, LF-23), October 2011. Qualifies for Air Force CATEX A2.3.12.**

The proposed action was to move overhead power lines at LF-02, -03, -21, and -23 to underground beginning at the first available pole from the outer perimeter fence. Two methods for installing the new underground primary conduit and wire were proposed: trenching with concrete encasement and directional boring.

**Table B-13.1 Comparative Analysis of MDA CATEX B-13 to Other Agency CATEXs.**

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Navy</b>	<b>U.S. Air Force</b>	<b>Federal Emergency Management Agency</b>	<b>Notes</b>
<b>Applicable CATEXs</b>	B-13	(e)(2)	(f)(36)	A2.3.12	44 CFR 10.8 (d) (2)	
<b>Characteristics of the Action</b>	<p>Acquisition, installation, modification, routine repair and replacement, and operation of utility (e.g. water, sewer, electrical) and communication systems, mobile antennas, data processing cable and similar electronic equipment that use existing rights-of-way, easements, distribution systems, facilities, or previously disturbed land. (REC is required).</p> <p>Utility and communications equipment, wiring and pipes are placed on existing rights-of-way, easements, distribution system facilities, or previously disturbed/used area (dirt, gravel, or concrete/asphalt roads or pads).</p> <p>Limited site preparations (e.g., grading, filling, trenching, etc.), if any, are conducted; spill containment barriers are used to contain fuel spills and coolant leaks during construction activities or test events.</p> <p>Cables can either lie on ground or be in conduit; if site conditions and time permits, cabling can be placed in shallow trenches dug in previously disturbed areas and utility easements.</p>	<p>Acquisition, installation, and operation of utility and communication systems, mobile antennas, data processing cable and similar electronic equipment that use existing right-of-way, easement, distribution systems, and/or facilities (REC required).</p> <p>MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, USAKA; WSMR, NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.</p>	<p>Acquisition, installation, and operation of utility (e.g., water, sewer, electrical) and communication systems (e.g., data processing cable and similar electronic equipment) which use existing rights of way, easements, distribution systems, and/or facilities.</p> <p>MDA has extensive experience working at U.S. Navy installations such as PMRF, HI; Point Mugu Sea Range, CA; San Nicolas Island, CA; and Dahlgren Naval Base, VA.</p>	<p>Installing, operating, modifying, and routinely repairing and replacing utility and communications systems, data processing cable, and similar electronic equipment that use existing rights of way, easements, distribution systems, or facilities.</p> <p>MDA has extensive experience working at U.S. Air Force Installations such as Vandenberg AFB, CA; Edwards AFB, CA; Wake Island; Clear AFS, AK; Elmendorf AFB, AK; Eareckson AFS, AK; and Schriever AFB, CO.</p>	(ix) Acquisition, installation, or operation of utility and communication systems that use existing distribution systems or facilities, or currently used infrastructure rights-of-way.	<p>Limiting proposed action to areas that are previously disturbed minimizes the potential to disturb sensitive environmental and/or cultural resources.</p> <p>Relying on limited site preparation minimizes potential impacts from construction activities.</p> <p>Use of spill containment barriers prevents contamination of soil.</p> <p>Limiting trenching to shallow depths in established easements minimizes the potential to disturb sensitive environments and cultural resources.</p> <p>Applying permit operating conditions and local requirements minimizes potential air impacts.</p>
<b>Methods of Implementing the Action</b>	<p>Work with host installation or property owner to find suitable location and permission to install and operate utilities, equipment, or mobile antennas.</p> <p>Work with host installation or property owner to identify applicable laws, regulations, SOPs, and existing areas with known natural and/or cultural resources and/or areas of environmental contamination to avoid.</p> <p>Work with host installation or property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation or property owner to conduct any required site preparation activities and/or coordination with Federal and state agencies.</p>	<p>Installation staff to find suitable location to install and operate utilities or equipment.</p> <p>Installation staff to identify applicable laws, regulations, management plans, SOPs, and existing areas with known natural and/or cultural resources and/or areas of environmental contamination to avoid.</p> <p>Installation staff to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Conduct any required site preparation and/or coordination with Federal and state agencies.</p>	Same	Same	Similar	<p>Construction and repair of utility systems on host installation and test ranges or commercial sites is a usual and customary activity, which conforms to the installation/range's master plan and all appropriate Federal and state regulations.</p>

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Navy</b>	<b>U.S. Air Force</b>	<b>Federal Emergency Management Agency</b>	<b>Notes</b>
<b>Frequency of the Actions</b>	Occasional.	Same	Same	Same	Same	Typical operations subject to conditions of installation or commercial site's regulatory permits and master schedule.
<b>Applicable Regulations</b>	NEPA, CWA, CAA, biological and cultural resource protection regulations, and other applicable state regulations.	Same, plus UES.	Same	Same	Same	
<b>Applicable SOPs</b>	Installation/Manufacturer specific	Same	Same	Same	Same	
<b>Timing and Context</b>	Could occur any time of the year. MDA relies on installation's or commercial site's infrastructure.	Sam	Same	Same	Same	
<b>Extraordinary Circumstances</b>	Presence of cultural/historic resources threatened or endangered species, or environmental contamination.	Same	Same	Same	Same	
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these operations.	Same	Same	Same	Unknown (but expected to be similar)	

**Table B-13.2 Comparative Analysis of MDA CATEX B-13 to MDA Environmental Analyses.**

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>National Missile Defense Deployment Environmental Impact Statement July 2000</b>	<b>Ground-Based Midcourse Defense (GMD) Validation of Operational Concept (VOC) Environmental Assessment, March 2002, FONSI Signed</b>	<b>Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Environmental Impact Statement, July 2003</b>	<b>Initial Defensive Operations Capability (IDOC) at Vandenberg Air Force Base Environmental Assessment, August 2003, FONSI Signed</b>	<b>Relocatable In-Flight Interceptor Communications System Data Terminal (IDT) #2 at Vandenberg Air Force Base, Supplemental Environmental Assessment, November 2007, FONSI Signed</b>
<b>Applicable CATEXs</b>	B-13					
<b>Characteristics of the Action</b>	<p>Acquisition, installation, modification, routine repair and replacement, and operation of utility (e.g. water, sewer, electrical) and communication systems, mobile antennas, data processing cable and similar electronic equipment that use existing rights-of-way, easements, distribution systems, facilities, or previously disturbed land. (REC is required).</p> <p>Utility and communications equipment, wiring and pipes are placed on existing rights-of-way, easements, distribution system facilities, or previously disturbed/used area (dirt, gravel, or concrete/asphalt roads or pads).</p> <p>Limited site preparations (e.g., grading, filling, trenching, etc.), if any, are conducted; spill containment barriers are used to contain fuel spills and antifreeze leaks during construction activities or test events.</p> <p>Cables can either lie on ground or be in conduit; if site conditions and time permits, cabling can be placed in shallow trenches dug in previously disturbed areas and utility easements.</p>	<p>Among other activities, the EIS analyzed the installation of utility and power cables, and water and sewer lines at various potential deployment locations.</p>	<p>An FOC network would be provided as the communications link between the components and sub-components of the GMD test sites. Existing FOC would be used whenever feasible. Where new FOC was required, cable may be installed on either side of rights-of-way (normally roads or railroad tracks). The FOC would be buried to a depth of approximately 3 feet. To the extent possible, candidate cable routes were identified along existing rights-of-way, minimizing the impact on the environment.</p>	<p>Portions of the Proposed Actions included: Three fiber optic administrative telephone circuits for voice communications and alarm monitoring. Power and fiber optic cable would be routed in existing right of ways where practicable.</p> <p>For communication among the components on the same installation, the ETR would maximize use of available communications assets, including cable. If communication cable is not available, new cable would be installed. Installation of new cable would be in existing conduit, if available. If not, new conduit would be constructed along rights-of-way. New conduit would be buried at a depth of approximately 3 feet, where necessary.</p>	<p>The proposed action, among other things, is for communication cable(s) to be installed between support facilities and silos, as required. Cables would be installed in existing conduits, where available. If existing conduits are not available, the cable(s) would be installed in new conduits that would be placed in previously disturbed areas of soil (usually along the shoulders of existing roads) approved by the Vandenberg AFB Environmental Management Office where possible to avoid sensitive biological and cultural areas.</p>	<p>Construction of the second RIDT would include installation among other things installation of communications lines and equipment, uninterruptable power supply; and installation of a septic system.</p> <p>Communications lines would be extended from an existing power line along El Rancho Road, including a cross connection with the existing RIDT. The lines would be placed in a buried flexible conduit, to be installed via trenching. Commercial power would be brought to the second RIDT from an existing power line along the east side of El Rancho Road. The new line would be installed by a combination of boring and trenching. A new water line with pump station would be required to provide water sufficient for fire fighting. Trenching for the water line would be required and buried power lines would be extended to the new pump station from the second RIDT site.</p>
<b>Methods of Implementing the Action</b>	<p>Work with host installation or property owner to find suitable location and permission to install and operate utilities, equipment, or mobile antennas.</p> <p>Work with host installation or property owner to identify applicable laws, regulations, SOPs, and existing areas with known natural and/or cultural resources and/or areas of environmental contamination to avoid.</p> <p>Work with host installation or property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation or property owner to conduct any required site preparation activities and/or coordination with Federal and state agencies.</p>	Same	Same	Same	Same	Same
<b>Frequency of the Actions</b>	Occasional.	Occasional	Occasional	Occasional	Occasional	One time - complete
<b>Applicable Regulations</b>	NEPA, CWA, CAA, biological and cultural resource protection regulations, and other applicable state regulations.	Same	Same	Same	Same	Same
<b>Applicable SOPs</b>	Installation/Manufacturer specific	Same	Same	Same	Same	Same

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>National Missile Defense Deployment Environmental Impact Statement July 2000</b>	<b>Ground-Based Midcourse Defense (GMD) Validation of Operational Concept (VOC) Environmental Assessment, March 2002, FONSI Signed</b>	<b>Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Environmental Impact Statement, July 2003</b>	<b>Initial Defensive Operations Capability (IDOC) at Vandenberg Air Force Base Environmental Assessment, August 2003, FONSI Signed</b>	<b>Relocatable In-Flight Interceptor Communications System Data Terminal (IDT) #2 at Vandenberg Air Force Base, Supplemental Environmental Assessment, November 2007, FONSI Signed</b>
<b>Applicable CATEXs</b>	B-13					
<b>Timing and Context</b>	Could occur any time of the year. MDA relies on installation's infrastructure.	Same	Variable	Same	Same	Same
<b>Extraordinary Circumstances</b>	Presence of cultural/historic resources threatened or endangered species, or environmental contamination.	Same	Same	Same.	Same	Same
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these operations.	No significant environmental impacts have been observed as a result of MDA's construction and operation of NMD (now MDA) facilities, including the installation of utilities, communication systems, mobile antennas and similar electronic equipment.	These actions were completed over nine years ago and no adverse environmental impacts have been reported.	These actions were completed over eight years ago and no adverse environmental impacts have been reported from installation of utilities, communication systems, mobile antennas and similar electronic equipment.	These actions were completed over eight years ago and no adverse environmental impacts have been reported from installation of utility lines.	No significant environmental impacts have been observed as a result of MDA's construction and operation of the IDT #2 and supporting facilities, including the installation of utility lines.

**B-14. Acquisition, installation or minor relocation, operation and maintenance or evaluation of physical security devices or controls to protect human or animal life and to enhance the physical security of existing critical assets in compliance with applicable Federal, tribal, state and local requirements to protect the environment. Examples include, but are not limited to:**

- a. Motion detection systems;**
- b. Raptor electrocution prevention devices;**
- c. Lighting;**
- d. Remote video surveillance systems;**
- e. Access controls; and**
- f. Physical barriers, fences, grating, on or adjacent to existing facilities.**

**(REC required.)**

The Team found the physical security devices or controls contemplated by this CATEX are used at various MDA sites located on Services ranges or installations, or other Federal/commercial sites. The Team noted these actions are not likely to alter or otherwise degrade the environment. Most of the physical security devices or controls are commercially available products purchased in compliance with Federal Acquisition Regulations and installed and managed in compliance with accepted standards and protocols. These products are also used by private industry and other government agencies.

The Team recognized this CATEX could involve actions involving one or more extraordinary circumstances (i.e., would adversely affect public health or safety; threatens a violation of Federal, state, or local environmental laws; or involves a site that includes wetlands not covered by a nation-wide or regional permit, endangered or threatened species, historical or archeological resources or hazardous wastes; etc.). Therefore, to ensure only those actions having negligible impacts on the human environment are contemplated, the Team proposed a REC be prepared to document no extraordinary circumstances exist and all CATEX use criteria are met, or whether the action requires further analysis through the NEPA process.

The Team determined the use of examples in this particular CATEX would be helpful to future users in clarifying the types of activities envisioned by the CATEX. In providing examples, the Team did not intend to either limit the CATEX to those activities or extend the CATEX to actions including extraordinary circumstances resulting in the activity having significant environmental effects.

As documented in Table B-14.1 and B-14.2, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;

- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;
- 4) Extraordinary circumstances associated with its application are absent and documented by a REC; and
- 5) No known significant impacts are associated with this proposed activity, beyond those resulting from accidental fuel spills during fueling activities, which are unplanned actions. Potential impacts are mitigated using spill containment equipment and SOPs.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusion and Administrative Record**

#### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(41) Installation of devices to protect human or animal life (e.g., raptor electrocution prevention devices, fencing to restrict wildlife movement onto airfields, and fencing and grating to prevent accidental entry to hazardous areas).

#### **U.S. Coast Guard**

**Reference:** *COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions*

(10) Installation of devices to protect human or animal life, such as raptor electrocution prevention devices, fencing to restrict wildlife movement on to airfields, and fencing and grating to prevent accidental entry to hazardous areas. (Checklist required).

#### **Federal Aviation Agency**

**Reference:** *FAA Order 5050.4A Chapter 3, Section 23*

(a) (3) Installation of miscellaneous items including segmented circles, wind or landing direction indicators or measuring devices, or fencing.

(a) (7) Landscaping generally, and landscaping or construction of physical barriers to diminish impact of airport blast and noise.

(b) (2) Acquisition of: security equipment required by rule or regulation for the safety or security of personnel and property on the airport (14 CFR Part 107), safety equipment required by rule or regulation for certification of an airport (14 CFR Part 139) or snow removal equipment.

**Reference: *FAA Order 1050.1E***

Equipment and Instrumentation Actions

9. Acquisition of security equipment required by rule or regulation for the safety or security of personnel and property on the airport or launch facility (14 CFR part 107, Airport Security), safety equipment required by rule or regulation for certification of an airport (14 CFR part 139, Certification and Operation: Land Airports Serving Certain Air Carriers) or licensing of a launch facility, or snow removal equipment.

**Department of Energy**

**Reference: *10 CFR1021 Subpart D Appendix B***

B1.11 Installation of fencing, including that for border marking that will not adversely affect wildlife movements or surface water flow.

**Missile Defense Agency Environmental Reviews**

**Reference: *Ground-Based Midcourse Defense (GMD) Validation of Operational Concept (VOC) Environmental Assessment, March 2002, resulting in a FONSI***

This EA analyzed among other things, components of site security to include a perimeter security fence, clear zone, security lighting, security standby power, intrusion detection system, and security patrol roads. The clear zone on the inner side of the fence would contain remotely operated lights and cameras. All vegetation would be cleared inside the security fence. Vegetation would be cleared to approximately 50 feet outside the security fence.

Thirteen broad areas of environmental consideration were considered and MDA determined no significant short- or long-term impacts would occur. No adverse environmental effects have been observed from installing or constructing these site security features.

**Reference: *Ground Based Midcourse Defense (GMD) Validation of Operational Concept (VOC) Supplemental Environmental Assessment, December 2002, resulting in a FONSI***

This SEA analyzed among other things, proposed security enhancements to ensure adequate force protection, land security, and air safety measures for Fort Greely. This included the construction of security fences around three areas: the cantonment area, the southern boundary area, and the Allen Army Airfield. The fences would be 8-foot high chain-link fencing with barbed wire above. Gates would be sited to facilitate ease of operations, emergency crew access, and security. Vegetation would be cleared from designated areas inside and outside the fence boundaries. The security fences may be constructed in series or all at one time, depending on funding and additional security requirements.

The resulting environmental analysis determined that no significant impacts would occur affecting the quality of the human environment. No adverse environmental impacts have been observed as a result of construction of site security at Ft Greely.

**Reference:** *Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Final Environmental Impact Statement, July 2003*

This EIS analyzed among other things, an expansion to the existing Intrusion Detection System to include all critical buildings associated with GMD operations. This expansion would include the installation of additional intrusion sensors, lighting, closed circuit television, and a monitor for sensors. Additional physical protection features would be constructed or placed to protect GMD assets. These may include, but are not limited to, fences, security lighting, bollards, tapered concrete barriers or similar devices, ditching and/or earth mounds, patrol roads, and observation tower(s).

Fourteen broad areas of environmental consideration were considered for assessing potential impacts and MDA determined that no significant impacts would occur from implementing the proposed activities. No adverse environmental effects have been observed from installing or constructing site security features.

**Reference:** *Missile Defense Agency Ground-Based Midcourse Defense (GMD) Sea-Based X-Band (SBX) Radar Placement and Operation Adak, Alaska Environmental Assessment, October 2005, resulting in a FONSI*

The EA analyzed the proposal to establish a security zone in accordance with 33 CFR Part 165, around the SBX in U.S. territorial waters while moored, anchored, or loitering in Kuluk Bay or Sitkin Sound. This security zone of approximately 500 yards would be required to ensure the physical protection of the SBX while positioned at the PSB. This security zone could include the installation and use of a floating security boom/fence for and/or operation of a security patrol boat. Transit through, or anchoring within, this security zone would be prohibited unless authorized by the appropriate SBX official.

Thirteen broad areas of environmental consideration were considered and MDA determined no significant short- or long-term impacts would occur.

**Reference:** *New Mission Beddown and Construction, Clear Air Force Station (AFS), Alaska Environmental Assessment, August 2012, resulting in a FONSI*

The proposed action among other things is to expand and upgrade the current Protection Level -1(PL-1) restricted perimeter to a double fence configuration with a buried line sensor in the isolation zone. A new Entry Control Point (ECP) and parking area would be constructed. The perimeter fence would be integrated with the ECP sensors to provide a continuous line of detection for the restricted area perimeter. The east portion of the existing security fence would be removed and a new fence located further east from the existing facility. Vehicle gates, vehicle entrapment areas and the pedestrian entry point would be incorporated at the ECP. A new animal control fence would be located 30 ft

outside the site security fence around the entire facility. The existing interior fence would be extended to match the new fence. A buried Intrusion Detection sensor would be provided at the fence line along with site lighting. A 16 ft wide gravel road would be provided outside the animal control fence to facilitate security monitoring. The area between the site security and animal control fence would be a 4 inch gravel surface. Relocation of the site security fence would require moving the existing drainage basin from its present location to outside the new fence line. Approximately 0.25 acres would be cleared for the new retention pond.

Seven broad areas of environmental consideration were considered and MDA determined no significant short- or long-term impacts would occur. This project is expected to begin construction in 2013.

**Table B-14.1 Comparative Analysis of MDA CATEX B-14 to Other Agency CATEXs.**

Benchmarking Categories	MDA	U.S. Navy	U.S. Coast Guard	Federal Aviation Agency	Department of Energy	Notes
Applicable CATEXs	B-14	(f)(41)	COMMANDANT INSTRUCTION M16475.1D, <i>Categorical Exclusions</i> (10)	FAA Order 5050.4A Chapter 3, Section 23 and FAA Order 1050.1E	10 CFR1021 Subpart D Appendix B B1.11	
Characteristics of the Action	<p>Acquisition, installation or minor relocation, operation and maintenance or evaluation of physical security devices or controls to protect human or animal life and to enhance the physical security of existing critical assets in compliance with applicable Federal, tribal, state and local requirements to protect the environment. Examples include, but are not limited to:</p> <ul style="list-style-type: none"> <li>a) Motion detection systems,</li> <li>b) Raptor electrocution prevention devices,</li> <li>c) Lighting</li> <li>d) Remote video surveillance systems</li> <li>e) Access controls</li> <li>f) Physical barriers, fences, grating, on or adjacent to existing facilities.</li> </ul> <p>(REC required)</p> <p>Installation and operation of these devices is consistent throughout the Military Services and security profession and is specified by DoD and Service requirements.</p> <p>Lighting would be installed per local requirements to minimize "shine."</p>	<p>Proposed action is limited to installation of devices to protect human or animal life (e.g., raptor electrocution prevention devices, fencing to restrict wildlife movement onto airfields, and fencing and grating to prevent accidental entry to hazardous areas).</p> <p>MDA has extensive experience working at U.S. Navy installations such as PMRF, HI; Point Mugu Sea Range, CA; San Nicolas Island, CA; and Dahlgren Naval Base, VA.</p>	<p>Proposed action is limited to installation of devices to protect human or animal life, such as raptor electrocution prevention devices, fencing to restrict wildlife movement on to airfields, and fencing and grating to prevent accidental entry to hazardous areas. (Checklist required).</p>	<p>a) (3) Installation of miscellaneous items including segmented circles, wind or landing direction indicators or measuring devices, or fencing.</p> <p>(a) (7) Landscaping generally, and landscaping or construction of physical barriers to diminish impact of airport blast and noise.</p> <p>(b) (2) Acquisition of: security equipment required by rule or regulation for the safety or security of personnel and property on the airport (14 CFR Part 107), safety equipment required by rule or regulation for certification of an airport (14 CFR Part 139) or snow removal equipment.</p> <p>Equipment and Instrumentation Actions 9. Acquisition of security equipment required by rule or regulation for the safety or security of personnel and property on the airport or launch facility (14 CFR part 107, Airport Security), safety equipment required by rule or regulation for certification of an airport (14 CFR part 139, Certification and Operation: Land Airports Serving Certain Air Carriers) or licensing of a launch facility, or snow removal equipment.</p>	<p>Installation of fencing, including that for border marking that will not adversely affect wildlife movements or surface water flow.</p>	<p>Installation and operation of these devices is consistent throughout the Military Services and commercial sites and is specified by DoD and Military Services requirements.</p> <p>Although vegetation and critical areas of habitat would be avoided to the extent possible, security factors are the primary criterion in the placement of these devices.</p>
Methods of Implementing the Action	<p>Work with host installation or property owner to identify applicable laws, regulations, management plans, SOPs, and existing areas with known natural and/or cultural resources and/or areas of environmental contamination.</p> <p>Work with host installation or property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation or property owner to conduct any required coordination with Federal and state agencies and obtain necessary permits.</p> <p>Work with host installation or property to conduct any required site preparation activities.</p>	<p>Installation staff to identify applicable laws, regulations, management plans, SOPs, and existing areas with known natural and/or cultural resources and/or areas of environmental contamination to avoid.</p> <p>Installation staff to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Installation staff conducts any required coordination with Federal and state agencies and obtains necessary permits.</p> <p>Conduct any required site preparation activities.</p>	Same	Similar	Similar	
Frequency of the Actions	One time and usually associated with construction of new facilities or deployment of existing assets to new locations without existing fencing/security measures already in place. In many cases, fencing/security devices already exist on host installation/range. Therefore, this kind of activity does not occur frequently.	Greater	Unknown, but expected to be greater	Unknown, but expected to be greater	Unknown	Typical range operations subject to conditions of installation's regulatory permits and management plans.

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Navy</b>	<b>U.S. Coast Guard</b>	<b>Federal Aviation Agency</b>	<b>Department of Energy</b>	<b>Notes</b>
<b>Applicable Regulations</b>	NEPA, CERCLA, RCRA, CWA, CAA and other applicable Federal and state regulations, DoD and Service requirements, and industry standards.	Same	Same	Same	Same	
<b>Applicable SOPs</b>	Installation/Manufacturer specific, but most are consistent among security devices.	Same	Same	Same	Same	
<b>Timing and Context</b>	This activity can occur at any time of the year in conjunction with test activities or where new site development is occurring. These activities are conducted at host installations or commercial properties where the same type of actions typically occurs.	Probably more frequent because of mission and scope of operations.	Unknown, but expected to be greater	Unknown, but expected to be greater	Unknown	
<b>Extraordinary Circumstances</b>	Presence of cultural, historic, or biological resources or environmental contamination.	Same	Same	Same	Same	
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these types of operations.	Same	Same	Same	Same	

**Table B-14.2 Comparative Analysis of MDA CATEX B-14 to MDA Environmental Analyses.**

Benchmarking Categories	MDA	Ground-Based Midcourse Defense (GMD) Validation of Operational Concept (VOC) Environmental Assessment, March 2002, FONSI Signed	Ground-Based Midcourse Defense (GMD) Validation of Operational Concept (VOC) Supplemental Environmental Assessment, December 2002, FONSI Signed	Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Environmental Impact Statement, July 2003	Missile Defense Agency Ground-Based Midcourse Defense (GMD) Sea-Based X-Band (SBX) Radar Placement and Operation Adak, Alaska Environmental Assessment, October 2005, FONSI Signed	New Mission Beddown and Construction, Clear Air Force Station (AFS), Alaska Environmental Assessment, August 2012, FONSI Signed
Applicable CATEXs	B-14					
<b>Characteristics of the Action</b>	<p>Acquisition, installation or minor relocation, operation and maintenance or evaluation of physical security devices or controls to protect human or animal life and to enhance the physical security of existing critical assets in compliance with applicable Federal, tribal, state and local requirements to protect the environment. Examples include, but are not limited to:</p> <ul style="list-style-type: none"> <li>a) Motion detection systems,</li> <li>b) Raptor electrocution prevention devices,</li> <li>c) Lighting</li> <li>d) Remote video surveillance systems</li> <li>e) Access controls</li> <li>f) Physical barriers, fences, grating, on or adjacent to existing facilities. (REC required).</li> </ul> <p>Installation and operation of these devices is consistent throughout the Military Services and security profession and is specified by DoD and Service requirements.</p> <p>Lighting would be installed per local requirements to minimize “shine.”</p>	<p>Components of test site security would include a perimeter security fence, clear zone, security lighting, security standby power, intrusion detection system, and security patrol roads. The clear zone on the inner side of the fence would contain remotely operated lights and cameras. All vegetation would be cleared inside the security fence. Vegetation would be cleared to approximately 50 feet outside the security fence.</p>	<p>The complete spectrum of MDA BMDS test activities were analyzed, including the construction of security fences around three areas: the cantonment area, the southern boundary area, and the Allen Army Airfield.</p>	<p>The proposed action among other things was to expand the existing Intrusion Detection System to include all critical buildings associated with GMD operations. This expansion may include the installation of additional intrusion sensors, lighting, closed circuit television, and a monitor for the sensors.</p> <p>Numerous proposed activities were analyzed, including the installation of fences, security lighting, bollards, tapered concrete barriers or similar devices, ditching and/or earth mounds, patrol roads, and observation tower(s).</p> <p>Security vehicles would be on patrol day and night. Normal patrols would be confined to existing roads.</p>	<p>A security zone would be established in accordance with 33 CFR Part 165, around the SBX in U.S. territorial waters while moored, anchored, or loitering in Kuluk Bay or Sitkin Sound. This security zone of approximately 500 yards would be required to ensure the physical protection of the SBX while positioned at the PSB. This security zone could include the installation and use of a floating security boom/fence for Alternative 1 mooring in Kuluk Bay around the SBX, and/or operation of a security patrol boat.</p>	<p>The proposed action among other things is to expand and upgrade the current PL-1 restricted perimeter to a double fence configuration with a buried line sensor in the isolation zone. A new ECP and parking area would be constructed.</p>
<b>Methods of Implementing the Action</b>	<p>Work with host installation or property owner to identify applicable laws, regulations, management plans, SOPs, and existing areas with known natural and/or cultural resources and/or areas of environmental contamination.</p> <p>Work with host installation or property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation or property owner to conduct any required coordination with Federal and state agencies and obtain necessary permits.</p> <p>Work with host installation or property to conduct any required site preparation activities.</p>	Same	Same	Same	Same	Same
<b>Frequency of the Actions</b>	<p>One time and usually associated with construction of new facilities or deployment of existing assets to new locations without existing fencing/security measures already in place. In many cases, fencing/security devices already exist on host installation/range. Therefore, this kind of activity does not occur frequently.</p>	<p>One time – complete. Except for maintenance of previously disturbed areas and routine operating of devices.</p>	<p>One time – complete. Except for maintenance of previously disturbed areas and routine operating of devices.</p>	<p>One time – complete. Except for maintenance of previously disturbed areas and routine operating of devices.</p>	<p>One time – complete. Except for maintenance of previously disturbed areas and routine operating of devices.</p>	<p>One time – complete. Except for maintenance of previously disturbed areas and routine operating of devices.</p>
<b>Applicable Regulations</b>	<p>NEPA, CERCLA, RCRA, CWA, CAA and other applicable Federal and state regulations, DoD and Service requirements, and industry standards.</p>	Same	Same	Same	Same.	Same

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>Ground-Based Midcourse Defense (GMD) Validation of Operational Concept (VOC) Environmental Assessment, March 2002, FONSI Signed</b>	<b>Ground-Based Midcourse Defense (GMD) Validation of Operational Concept (VOC) Supplemental Environmental Assessment, December 2002, FONSI Signed</b>	<b>Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Environmental Impact Statement, July 2003</b>	<b>Missile Defense Agency Ground-Based Midcourse Defense (GMD) Sea-Based X-Band (SBX) Radar Placement and Operation Adak, Alaska Environmental Assessment, October 2005, FONSI Signed</b>	<b>New Mission Beddown and Construction, Clear Air Force Station (AFS), Alaska Environmental Assessment, August 2012, FONSI Signed</b>
<b>Applicable CATEXs</b>	B-14					
<b>Applicable SOPs</b>	Installation/Manufacturer specific, but most are consistent among security devices.	Same	Same	Same	Same	Same
<b>Timing and Context</b>	This activity can occur at any time of the year in conjunction with test activities or where new site development is occurring. These activities are conducted at host installations or commercial properties where the same type of actions typically occurs.	24 hours/7 days a week operations	Same	Same		
<b>Extraordinary Circumstances</b>	Presence of cultural, historic, or biological resources or environmental contamination.	Same	Same	Same	Same	Same
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these types of operations.	No adverse environmental impacts have been observed since completion of the project over eight years ago.	These actions were completed over nine years ago and no adverse environmental impacts have ever been reported from installation of this security fencing.	These actions were completed over nine years ago and no adverse environmental impacts have ever been reported from installation of this security fencing.	The SBX was not deployed to the Adak, AK area.	Construction is expected to begin in 2013.

### **B-15. Maintenance of archaeological, historical, and endangered or threatened species avoidance markers, fencing, and signs.**

Natural resource management activities of the type contemplated by this CATEX would be undertaken to avoid impacts to native flora and fauna, archeological and historical sites. Any potential for environmental impacts would be small scale and confined to more localized impacts. Environmental impacts, if any, would be slight as any signage would impact a small area if at all and would be sited in close working coordination with host installation environmental management specialists so as to further minimize any potential biological or cultural resources impacts. Maintenance activities envisioned in this CATEX are intended to provide a benefit to the resource by providing added protection to existing sensitive resources by alerting personnel working in the area to avoid the sensitive areas.

These activities would be conducted following existing installation or range standard operating procedures, as well as following any Integrated Natural Resource Management Plans (INRMP), Integrated Cultural Resources Management Plans (ICRMP) and applicable Federal, state and DoD regulations designed to protect the quality of the human environment. These procedures will prevent significant impacts because they dictate where and how safeguards will be placed to minimize impacts on the resources they are intended to protect. Failure to install these safeguards would create the possibility of serious environmental impacts. Failure to mark sensitive locations and prevent unlimited access could lead to trampling of sensitive vegetation, disturbance of protected wildlife, and damage of archaeological resources.

The Team reviewed other agencies' CATEXs, particularly the Services where MDA would conduct these type of activities on their ranges/installations. Because these activities: 1) are the same type of activities conducted by our Host installations and ranges at the similar locations, and 2) must follow existing installation standard operating procedures and Federal, state, local, and tribal environmental requirements, the activities contemplated by this CATEX inherently do not have an individual or cumulative significant impact on the environment.

As documented in Table B-15.1, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;
- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;
- 4) Extraordinary circumstances associated with its application are absent; and
- 5) No known significant impacts are associated with this proposed activity.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusion and Administrative Record**

#### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(d) (5) Maintenance of archaeological, historical, and endangered/threatened species avoidance markers, fencing, and signs.

#### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(42) Reintroduction of endemic or native species (other than endangered or threatened species) into their historic habitat when no substantial site preparation is involved.

#### **Federal Emergency Management Agency**

**Reference:** *44 CFR § 10.8 (d) (2)*

(xi) Planting of indigenous vegetation.

#### **U.S. Coast Guard**

**Reference:** *COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions*

(27) Natural and cultural resource management and research activities that are in accordance with inter-agency agreements and which are designed to improve or upgrade the USCG's ability to manage those resources.

**Table B-15.1 Comparative Analysis of MDA PCATEX B-15 to Other Agency CATEXs.**

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Navy</b>	<b>U.S. Coast Guard</b>	<b>Notes</b>
<b>Applicable CATEXs</b>	B-15	(d)(5)	(f)(42)	(27)	
<b>Characteristics of the Action</b>	Maintenance of archaeological, historical, and endangered or threatened species avoidance markers, fencing, and signs.	Proposed action is limited to maintenance of archaeological, historical, and endangered/threatened species avoidance markers, fencing, and signs.  MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, USAKA; WSMR, NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.	Proposed action is limited to reintroduction of endemic or native species (other than endangered or threatened species) into their historic habitat when no substantial site preparation is involved.  MDA has extensive experience working at U.S. Navy installations such as PMRF, HI; Point Mugu Sea Range, CA; San Nicolas Island, CA; and Dahlgren Naval Base, VA.	Proposed action is limited to natural and cultural resource management and research activities that are in accordance with inter-agency agreements and which are designed to improve or upgrade the USCG's ability to manage those resources.	
<b>Methods of Implementing the Action</b>	These activities would be conducted following existing installation or range standard operating procedures, as well as following any INRMPs, ICRMPs and all applicable Federal, state, and DoD regulations designed to protect the quality of the human environment.  Work with host installation to identify applicable laws, regulations, management plans and SOPs.  Work with host installation to obtain required permits, if any.  Work with host installation to either review existing documentation and/or prepare necessary NEPA and/or documentation.  Work with host installation to conduct any required coordination with Federal and state agencies.	Installation staff to identify applicable laws, regulations, management plans, SOPs.  Installation staff to either review existing documentation and/or prepare necessary NEPA documentation.  Installation staff conducts any required coordination with Federal and state agencies and obtains necessary permits.	Same	Similar	All these activities are conducted according to detailed regulations that are fundamentally consistent across Federal agencies. State regulations often differ on state specific archeological, historical, and endangered or threatened species found there.
<b>Frequency of the Actions</b>	Installation of these markers, fences, and signs is infrequent, especially since MDA operations usually avoid such sensitive areas. Also, signs and fencing have usually already been erected by the host installation. Maintenance may occur over the course of a year.	Greater	Greater	Unknown	
<b>Applicable Regulations</b>	Federal and state natural and cultural resource protection regulations, and installation natural and cultural resource management plans required by these regulations.	Same	Same	Same	
<b>Applicable SOPs</b>	Installation specific and species specific.	Same	Same	Same	
<b>Timing and Context</b>	These actions can occur at any time, but on host installations with developed natural and cultural resource programs.	Same	Same	Same	
<b>Extraordinary Circumstances</b>	None.	Same	Same	Same	
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known impacts from these types of operations.	Same	Same	Same	

**B-16. Road or trail construction and repair on existing rights-of-ways or in previously disturbed areas which do not result in a change in functional use. Runoff, erosion, and sedimentation are controlled through implementation of best management practices (BMP). (REC required.)**

Activities contemplated by this CATEX are those undertaken within or near existing structures and facilities or along roads with existing rights-of ways or easements in a manner compliant with established Federal, state, local, and DoD requirements. The Team limited the scope of the activities contemplated by this CATEX to using existing rights-of-ways or previously disturbed areas. These areas would include properties having already been disturbed by prior use and the quality of biological resources would be minimal or non-existent and cultural resources are likely to have been previously identified and addressed, thereby eliminating potential biological or cultural resources impacts. The Team reasoned that road repair, by definition, could only occur in areas where a road previously existed. If an abandoned road was later reconstructed in the same right-of-way this would not likely disturb significant new areas of natural or cultural resources.

However, the Team realized if a road was abandoned for a long enough period of time, environmental conditions may revert back to a more natural state. In addition, old road right-of-ways may have been established at a time when the potential for impacts to the human environment were not a factor in decision making. The majority of road reconstruction activities should occur on right-of-ways having been used in the recent past and not abandoned long enough to revert back to natural habitat. Because of these circumstances and the potential for actions to involve one or more extraordinary circumstances (i.e., would adversely affect public health or safety; threatens a violation of Federal, state, or local environmental laws; or involves a site that includes wetlands not covered by a nation-wide or regional permit, endangered or threatened species, historical or archeological resources or hazardous wastes), the Team proposed a REC be prepared to document no extraordinary circumstances exist and all CATEX-use criteria are met.

Lastly, the Team recognized road reconstruction has the potential to generate indirect offsite environmental impacts. Therefore, the Team limited the scope of this CATEX to construction of roads where runoff, erosion and sedimentation issues are prevented through implementation of best management practices (BMPs). As a result of these limitations, the Team determined this CATEX contemplated activities that would inherently have no potential for significant impacts to the human environment.

As documented in Table B-16.1, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;

- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;
- 4) Extraordinary circumstances associated with its application are absent and documented by a REC; and
- 5) No known significant impacts are associated with this proposed activity, beyond those resulting from accidental fuel spills during fueling activities, which are unplanned actions. Potential impacts are mitigated using spill containment equipment and SOPs.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusion and Administrative Record**

#### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(c)(3) Road or trail construction and repair on existing rights-of-ways or on previously disturbed areas.

#### **US Coast Guard**

**Reference:** *COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions*

(5) Routine repair and maintenance of buildings, roads, airfields, grounds, equipment, and other facilities which do not result in a change in functional use, or an impact on a historically significant element or setting.

#### **Federal Aviation Agency**

**Reference:** *FAA Order 5050.4A Chapter 3, Section 23.*

(5) Construction, relocation or repair of entrance and service roadway.

#### **Missile Defense Agency Environmental Reviews**

**Reference:** *Missile Defense Agency Courtland Target Assembly Facility Environmental Assessment, October 2006, resulting in a FONSI*

The EA analyzed among other things the construction of access roads, a rail spur, and utilities extensions. The proposed rail spur would extend 1.2 miles from the main rail line in the Town of Courtland and terminate at the proposed Motor Transfer Facility at the Courtland Facility. The rail spur would be constructed on top of an older, unused rail bed. A 120-foot long trestle also would be constructed to allow the rail spur to cross over a 12-foot deep ditch.

An analysis of the proposed action has concluded there are no significant short-term or long-term effects to the environment. No adverse environmental impacts from road and rail construction at the Courtland Facility have been observed. Erosion, runoff and sedimentation BMPs have been observed to be effective in preventing siltation and runoff to adjacent streams.

**Reference: *REC GMD Entry Control Facility Relocations at Fort Greely, AK, 2002. Qualifies for Army CATEX (C)(3).***

The proposed action included among other things construction of roads on previously disturbed land and upgrades of existing roads.

**Reference: *REC GMD South Construction Access Road at Fort Greely, Alaska, May 2004. Qualifies for Army CATEX (C)(3).***

The proposed action was to establish a southern access road to the GMD site following portions of the existing Fire Break Road. It would also include a new section of access road north of from the Fire Break Road into the GMD site.

**Reference: *REC AN/TPY-2 Radar Deployment at the Ted Stevens Marine Research Institute (TSMRI) on the National Oceanic and Atmospheric Administration (NOAA) Site in Juneau, Alaska in Support of Flight Test Ground-Based Interceptor (FTG) -04, May 2007. Qualifies for Army CATEX (C)(3).***

The proposed action among other things was for development of a gravel parking lot for up to 15 vehicles and development of a gravel access road from the NOAA driveway, approximately 100 feet long.

**Reference: *REC Parking Lot Improvements at the Ted Stevens Marine Research Institute (TSMRI) on the National Oceanic and Atmospheric Administration (NOAA) Site in Juneau, Alaska, July 2008. Qualifies for Army CATEX (C)(3).***

The proposed action is to improve the existing parking area adjacent to the MDA radar site by applying approximately 200 cubic yards of crushed stone to an area of approximately 100 feet by 60 feet.

**Table B-16.1 Comparative Analysis of MDA CATEX B-16 to Other Agency CATEXs.**

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Coast Guard</b>	<b>Federal Aviation Agency</b>	<b>Notes</b>
<b>Applicable CATEXs</b>	B-16	(c)(3)	COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions (5)	FAA Order 5050.4A Chapter 3, Section 23. (a) (5)	
<b>Characteristics of the Action</b>	<p>Road or trail construction and repair on existing rights-of-ways in recently disturbed areas which have not reverted back to natural habitat and which do not result in a change in functional use. Runoff, erosion, and sedimentation issues are prevented through implementation of best management practices. (REC required).</p> <p>BMPs include storm water, erosion, sedimentation and fugitive dust controls. These may include such features as berms, riprap, culverts, retention ponds, dust suppression during construction as well as reseeded of disturbed areas with native vegetation.</p> <p>The impacts of construction machinery and crews would also be limited to the existing right-of-way, and would be controlled by runoff and sedimentation BMPs. Noise and air emissions would not be significant.</p>	<p>Proposed action is limited to road or trail construction and repair on existing rights-of-ways or on previously disturbed areas.</p> <p>MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, USAKA; WSMR, NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.</p>	<p>Proposed action is limited to routine repair and maintenance of buildings, roads, airfields, grounds, equipment, and other facilities which do not result in a change in functional use, or an impact on a historically significant element or setting.</p>	<p>Proposed action is limited to construction, relocation or repair of entrance and service roadway.</p>	
<b>Methods of Implementing the Action</b>	<p>These activities would be conducted following existing installation or range standard operating procedures, as well as following any ICRMPs, INRMPs, CWA, CAA, and all applicable Federal, state, and DoD regulations designed to protect the quality of the human environment. These procedures will prevent impacts because they will dictate where and how construction and maintenance will be conducted so as to minimize impacts on the adjacent environment.</p> <p>Work with host installation or property owner to identify applicable laws, regulations, management plans and SOPs.</p> <p>Work with host installation or property owner to obtain required permits, if any.</p> <p>Work with host installation or property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation to conduct any required coordination with Federal and state agencies.</p>	<p>Installation would conduct these activities following existing installation or range standard operating procedures, as well as following any ICRMPs, INRMPs, CWA, CAA, and all applicable Federal, state, and DoD regulations designed to protect the quality of the human environment. These procedures will prevent impacts because they will dictate where and how construction and maintenance will be conducted so as to minimize impacts on the adjacent environment.</p> <p>Installation staff would identify applicable laws, regulations, management plans and SOPs.</p> <p>Installation staff would obtain required permits, if any.</p> <p>Installation staff would either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Installations staff would conduct any required coordination with Federal and state agency.</p>	Similar	Similar	All these activities are conducted according to detailed regulations that are fundamentally consistent across Federal agencies. State regulations could differ.
<b>Frequency of the Actions</b>	Road/trail construction is infrequent and usually occurs for new facilities without existing entrance roads. In most cases, roads have already been constructed by the host installation.	Greater	Greater	Unknown	
<b>Applicable Regulations</b>	Installation and range standard operating procedures, as well as ICRMPs, INRMPs, CWA, CAA, and all applicable Federal, state, and DoD regulations designed to protect the quality of the human environment	Same	Sam	Same	
<b>Applicable SOPs</b>	Installation specific.	Same	Same	Same	

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Coast Guard</b>	<b>Federal Aviation Agency</b>	<b>Notes</b>
<b>Timing and Context</b>	These actions can occur at any time, but usually on host installations with developed natural and cultural resource management programs.	Same	Same	Same	
<b>Extraordinary Circumstances</b>	Presence or resurgence of biological resources, wetlands and cultural/historic resources.	Same	Same	Same	
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these types of operations.	Same	Same	Same	

**B-17. Routine repair and maintenance of buildings, vessels, aircraft, grounds, and other facilities and equipment which do not result in a change in functional use or a significant impact on a historically significant element or setting. Examples include, but are not limited to: repair of roofs, doors, windows, or fixtures, localized pest management, and minor erosion control measures**

Repair and maintenance activities contemplated by this CATEX are usual and customary activities conducted at all DoD Host installations, ranges and commercial/industrial sites on a day-to-day basis. These categories of actions were determined to have little potential for significant environmental impacts for the following reasons:

- 1) Repair and maintenance activities follow standard operating procedures in accordance with appropriate laws and regulations to minimize impacts to the environment;
- 2) These activities also are sufficiently small in scope and environmentally benign in character so as not to result in significant environmental impacts; and
- 3) MDA has been conducting these type activities for 20 plus years without observing significant environmental impacts.

The Team determined the use of examples in this particular CATEX would be helpful to future users in clarifying the types of activities envisioned by the CATEX. In providing examples, the Team did not intend to either limit the CATEX to those activities or extend the CATEX to actions including extraordinary circumstances resulting in the activity having significant environmental effects.

In addition, this CATEX is supported by long-standing practices and use of similar CATEXs by the Services and their installations where MDA conducts the majority of its activities, as well as other federal agencies. The Team determined the characteristics of the activities at MDA were no different than those performed by other Federal agencies in general, as well as specifically related to the environment.

As documented in Table B-17.1 and B-17.2, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;
- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;
- 4) Extraordinary circumstances associated with its application are absent; and

- 5) No known significant impacts are associated with this proposed activity, beyond those resulting from accidental fuel spills during fueling activities, which are unplanned actions. Potential impacts are mitigated using spill containment equipment and SOPs.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusion and Administrative Record**

#### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(g)(1) Routine repair and maintenance of buildings, airfields, grounds, equipment, and other facilities. Examples include, but are not limited to: Removal and disposal of asbestos-containing material (for example, roof material and floor tile) or lead-based paint in accordance with applicable regulations; removal of dead, diseased, or damaged trees; and repair of roofs, doors, windows, or fixtures (REC required for removal and disposal of asbestos-containing material and lead-based paint or work on historic structures).

(g)(3) Routine repair and maintenance of equipment and vehicles (for example, autos, tractors, lawn equipment, military vehicles, etc.) which is substantially the same as that routinely performed by private sector owners and operators of similar equipment and vehicles. This does not include depot maintenance of unique military equipment.

#### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(8) Routine repair and maintenance of buildings, facilities, vessels, aircraft, and equipment associated with existing operations and activities (e.g., localized pest management activities, minor erosion control measures, painting, refitting).

#### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.9. Repairing and replacing real property installed equipment.

A2.3.10. Routine facility maintenance and repair that does not involve disturbing significant quantities of hazardous materials such as asbestos and lead-based paint.

## **U.S. Coast Guard**

**Reference:** *COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions*

(5) Routine repair and maintenance of buildings, roads, airfields, grounds, equipment, and other facilities which do not result in a change in functional use, or an impact on a historically significant element or setting.

(7) Routine repair and maintenance to waterfront facilities, including mooring piles, fixed floating piers, existing piers, and unburied power cables.

## **Federal Emergency Management Agency**

**Reference:** *44 CFR10.8 (d) (2)*

(x) Routine maintenance, repair, and grounds-keeping activities at FEMA facilities;

(xv) Repair, reconstruction, restoration, elevation, retrofitting, upgrading to current codes and standards, or replacement of any facility in a manner that substantially conforms to the preexisting design, function, and location; [SE, in part]

**Reference:** *Mobile Sensors Environmental Assessment, September 2005, resulting in a FONSI*

MDA prepared this EA to analyze the use of land-based mobile sensors and airborne sensor systems at new and existing locations around the country. For land-based mobile sensors, activities included transporting sensors, site preparation, check out of equipment, activating the sensor and disassembling the sensors. Activities associated with airborne sensor systems included flying sensor systems to test support locations, setting up, checking out and performing maintenance on aircraft and airborne sensor systems, calibration of sensors, activation of sensors and flying airborne sensor systems back to bed down locations. Maintenance and repair of land-based sensor equipment, airborne sensor systems and aircraft were considered.

An analysis of the proposed action concluded there would be no significant short-term or long-term effects to the environment or surrounding populations. MDA has conducted numerous test activities using mobile sensors in many locations including Alaska, Wake Island, and Hawaii. No adverse environmental impacts have been observed with the maintenance and repair of these assets.

**Reference:** *Sea-Based X-Band (SBX) Radar Vessel Maintenance and Repair Environmental Assessment, April 2011, resulting in a FONSI*

This EA analyzed the proposed maintenance activities at one of the contingency locations (Naval Station Everett (NSE) or Naval Air Station North Island (NASNI)), with a deep-water port capable of providing the required maintenance activities. Inspection, maintenance, and repair activities on the SBX Radar Vessel are similar to activities that are performed on all U.S. Navy ships. These activities include thruster maintenance,

painting, welding, blasting, sanding, plasma cutting, inspections, installation of new equipment, removal of broken and obsolete equipment, equipment calibration, washing of equipment and vessel, and purging of systems (e.g., cooling, sewage, water, etc.). These activities would occur inside the vessel, outside the vessel (topside and below the waterline), and pier-side. Established standard industry BMPs would apply to these activities. The vessel would be in-port for maintenance and repair for approximately 3 months, unless affected by operational needs or world events.

Fourteen broad areas of environmental analysis were considered and MDA determined no significant impacts would occur from maintenance activities associated with the proposed action.

**Reference: *AF 813 KEI Booster Flight Vehicle Integration at Building 6527, December 2006. Qualifies for Air Force CATEX A2.3.10.***

The proposed action is to remove the existing clean room and erect a tent enclosure on the exterior of the main bay door to provide additional floor space for the fully integrated vehicle.

**Reference: *REC Launch Control Facility Life Safety Upgrades at Meck Island, United States Army Kwajalein Atoll (USAKA), January 2007. Qualifies for Army CATEX (g)(1).***

The proposed action was to install fire sprinklers, fire alarm system, and emergency exits and lighting; replace existing doors with fire rated doors; construct new fire rated corridor walls, and stairwell and door panic hardware for emergency egress; and replace the roof of the Launch Control Facility.

**Reference: *MFR Review of Environmental Consideration Related to Sea-Based X-Band (SBX) Radar Vessel Maintenance and Upgrade at Vigor Shipyard, Seattle, WA, May 2011.***

MDA determined the proposed maintenance and upgrades to be performed on the SBX Radar Vessel were routine activities conducted at commercial facilities. Vigor Shipyard performs vessel maintenance, repair, upgrade and construction services for vessels of various sizes (including aircraft carriers) for government and commercial customers. Inspection, maintenance, and upgrade activities on the SBX Radar Vessel were determined to be similar activities that are performed on other U.S. Navy ships.

**Reference: *AF 813 MDA Consolidated Interceptor Facility at Building 1819 at VAFB, August 2012. Qualifies for Air Force CATEX A2.3.10.***

The proposed action included among other things internal minor modifications along with electrical upgrades, communication upgrades, and security upgrades.

**Table B-17.1 Comparative Analysis of MDA CATEX B-17 to Other Agency CATEXs.**

Benchmarking Categories	MDA	U.S. Army	U.S. Navy	U.S. Air Force	U.S. Coast Guard	Notes
Applicable CATEXs	B-17	(g)(1); (g)(3)	(f)(8)	A2.3.9; A2.3.10	(5); (7)	
Characteristics of the action	<p>Routine repair and maintenance of buildings, vessels, aircraft, grounds, and other facilities and equipment which do not result in a change in functional use or an impact on a historically significant element or setting. Examples include: repair of roofs, doors, windows, or fixtures, localized pest management and minor erosion control measures.</p> <p>Maintenance activities of this type are usual and customary activities conducted at all DoD Host installations, ranges and industrial/commercial properties on a day-to-day basis and follow standard operating procedures and are performed in accordance with appropriate laws and regulations. These activities are sufficiently small in scope and environmentally benign in character.</p> <p>For sea-going vessels, these activities may include engine maintenance, painting, welding, blasting, sanding, plasma cutting, inspections, installation of new equipment, removal of broken and obsolete equipment, equipment calibration, washing of equipment and vessel, and purging of systems (e.g., cooling, sewage, water, etc.). These activities would occur inside the vessel, outside the vessel (topside and below the waterline), and pier-side. Established standard industry BMPs would apply to these activities.</p>	<p>Proposed action is limited to: (g)(1) Routine repair and maintenance of buildings, airfields, grounds, equipment, and other facilities. Examples include, but are not limited to: Removal and disposal of asbestos-containing material (for example, roof material and floor tile) or lead-based paint in accordance with applicable regulations; removal of dead, diseased, or damaged trees; and repair of roofs, doors, windows, or fixtures (REC required for removal and disposal of asbestos-containing material and lead-based paint or work on historic structures).</p> <p>(g)(3) Routine repair and maintenance of equipment and vehicles (for example, autos, tractors, lawn equipment, military vehicles, etc.) which is substantially the same as that routinely performed by private sector owners and operators of similar equipment and vehicles. This does not include depot maintenance of unique military equipment.</p> <p>MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, USAKA; WSMR, NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.</p>	<p>Proposed action is limited to routine repair and maintenance of buildings, facilities, vessels, aircraft, and equipment associated with existing operations and activities (e.g., localized pest management activities, minor erosion control measures, painting, refitting).</p> <p>MDA has extensive experience working at U.S. Navy installations such as PMRF, HI; Point Mugu Sea Range, CA; San Nicolas Island, CA; and Dahlgren Naval Base, VA.</p>	<p>Proposed action is limited: A2.3.9 Repairing and replacing real property installed equipment.</p> <p>A2.3.10 Routine facility maintenance and repair that does not involve disturbing significant quantities of hazardous materials such as asbestos and lead-based paint.</p> <p>MDA has extensive experience working at U.S. Air Force Installations such as Vandenberg AFB, CA; Edwards AFB, CA; Wake Island; Clear AFS, AK; Elmendorf AFB, AK; Eareckson AFS, AK; and Schriever AFB, CO.</p>	<p>Proposed action is limited to: (5) routine repair and maintenance of buildings, roads, airfields, grounds, equipment, and other facilities which do not result in a change in functional use, or an impact on a historically significant element or setting.</p> <p>(7) Routine repair and maintenance to waterfront facilities, including mooring piles, fixed floating piers, existing piers, and unburied power cables.</p>	
Methods of Implementing the action	<p>Work with host installation or private property owner to identify applicable laws, regulations, management plans and SOPs and areas of known environmental contamination.</p> <p>Work with host installation or private property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation to conduct any required coordination with Federal and state agencies.</p>	<p>Installation staff would identify applicable laws, regulations, management plans and SOPs and areas of known contamination.</p> <p>Installation staff would either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Installations staff would conduct any required coordination with Federal and state agency.</p>	Same	Same	Similar	All these activities are conducted according to detailed regulations that are fundamentally consistent across Federal agencies. State regulations could differ.
Frequency of the Actions	Repairs generally occur one time in one area/component; maintenance activities range in occurrence from daily, weekly, monthly, or annually depending on the system/component being serviced.	Same	Same	Same	Same	Typical range operations subject to conditions of installation's regulatory permits and cultural resource and hazardous material management plans and environmental restoration program.
Applicable Regulations	NEPA, NHPA, ARPA, CERCLA, CAA, CWA and other applicable Federal and state regulations, DoD and Military Service requirements, and industry standards.	Same	Same	Same	Same	

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Navy</b>	<b>U.S. Air Force</b>	<b>U.S. Coast Guard</b>	<b>Notes</b>
<b>Applicable SOPs</b>	Installation/Manufacturer specific	Same	Same	Same	Same	
<b>Timing and Context</b>	Can occur at any time of year. Activities occur on host military installations and ranges or commercial facilities.	Same	Same	Same	Same	
<b>Extraordinary Circumstances</b>	Demolition and removal of hazardous materials is addressed by CATEX B-19.	Same	Same	Same	Same	
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these types of activities.	Same	Same	Same	Unknown (but expected to be similar)	

**Table B-17.2 Comparative Analysis of MDA CATEX B-17 to MDA Environmental Analyses.**

Benchmarking Categories	MDA	Sea-Based X-Band (SBX) Radar Vessel Maintenance and Repair Environmental Assessment, April 2011. FONSI Signed	Mobile Sensors Environmental Assessment, September 2005. FONSI Signed
<b>Applicable CATEXs</b>	B-17		
<b>Characteristics of the Action</b>	<p>Routine repair and maintenance of buildings, vessels, aircraft, grounds, and other facilities and equipment which do not result in a change in functional use or an impact on a historically significant element or setting. Examples include: repair of roofs, doors, windows, or fixtures, localized pest management and minor erosion control measures.</p> <p>Maintenance activities of this type are usual and customary activities conducted at all DoD Host installations, ranges and industrial/commercial properties on a day-to-day basis and follow standard operating procedures and are performed in accordance with appropriate laws and regulations. These activities are sufficiently small in scope and environmentally benign in character.</p> <p>For sea-going vessels, these activities may include engine maintenance, painting, welding, blasting, sanding, plasma cutting, inspections, installation of new equipment, removal of broken and obsolete equipment, equipment calibration, washing of equipment and vessel, and purging of systems (e.g., cooling, sewage, water, etc.). These activities would occur inside the vessel, outside the vessel (topside and below the waterline), and pier-side. Established standard industry BMPs would apply to these activities.</p>	<p>The proposed action analyzed in this EA is to conduct maintenance activities at one of the contingency locations (NSE or NASNI), with a deep-water port capable of providing the required maintenance activities. Inspection, maintenance, and repair activities on the SBX Radar Vessel are similar to activities that are performed on all U.S. Navy ships. These activities include thruster maintenance, painting, welding, blasting, sanding, plasma cutting, inspections, installation of new equipment, removal of broken and obsolete equipment, equipment calibration, washing of equipment and vessel, and purging of systems (e.g., cooling, sewage, water, etc.). These activities would occur inside the vessel, outside the vessel (topside and below the waterline), and pier-side. Established standard industry BMPs would apply to these activities. The vessel would be in-port for maintenance and repair for approximately 3 months, unless affected by operational needs or world events.</p>	<p>The proposed action analyzed the use of land-based mobile sensors and airborne sensor systems at new and existing locations around the country. For land-based mobile sensors, activities included transporting sensors, site preparation, check out of equipment, activating the sensor and disassembling the sensors. Activities associated with airborne sensor systems included flying sensor systems to test support locations, setting up, checking out and performing maintenance on aircraft and airborne sensor systems, calibration of sensors, activation of sensors and flying airborne sensor systems back to bed down locations. Maintenance and repair of land-based sensor equipment, airborne sensor systems and aircraft were considered.</p>
<b>Methods of Implementing the Action</b>	<p>Work with host installation or private property owner to identify applicable laws, regulations, management plans and SOPs and areas of known environmental contamination.</p> <p>Work with host installation or private property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation to conduct any required coordination with Federal and state agencies.</p>	Same	Same
<b>Frequency of the Actions</b>	Repairs generally occur one time in one area/component; maintenance activities range in occurrence from daily, weekly, monthly, or annually depending on the system/component being serviced.	One time	Same
<b>Applicable Regulations</b>	NEPA, NHPA, ARPA, CERCLA, CAA, CWA and other applicable Federal and State Regulations, DoD and Service requirements, and industry standards.	Same	Same
<b>Applicable SOPs</b>	Installation/Manufacturer specific	Same	Same
<b>Timing and Context</b>	Can occur at any time of year. Activities occur on host military installations and ranges or commercial facilities.	Same	Same
<b>Extraordinary Circumstances</b>	Demolition and removal of hazardous materials is addressed by CATEX B-19.	Same	Same
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these types of activities.	No adverse environmental impacts have been reported from the maintenance and repair of the SBX.	MDA has conducted numerous test activities using mobile sensors including modification, maintenance, and repair of facilities, vessels and aircraft and no environmental impacts have been observed.

**B-19. New construction or equipment installation or alterations (interior and exterior) to or construction of an addition to an existing structure that is similar to existing land use if the area to be disturbed has no more than 5.0 cumulative acres of new surface disturbance. The following conditions must be met:**

- a. The structure and proposed use are compatible with applicable Federal, tribal, state and local planning and zoning standards;**
- b. The site and scale of construction or improvement is consistent with those of existing, adjacent, or nearby buildings, and;**
- c. The construction or improvement will not result in uses that exceed existing support infrastructure capacities (roads, sewer, water, parking, etc.).**

**This does not include construction of facilities for the transportation, distribution, use, storage, treatment, and disposal of solid waste or hazardous waste. (REC required.)**

Alterations or construction activities contemplated by this CATEX are usual and customary activities conducted at all DoD host installations, ranges and commercial/industrial sites on a routine basis. These categories of actions were determined to have little potential for significant environmental impacts. MDA reviewed other agencies' CATEXs, particularly the Services where MDA typically conducts mission activities on their ranges/installations. The Team determined the above-enumerated CATEX encompassed activities that do not have an individual or cumulative significant impact on the environment because:

- 1) The activity is of a type that would be consistent with approved military installation or industrial site management plans and is thereby compatible with existing land use for the location;
- 2) Actions are areas where the quality of biological resources would be minimal or non-existent and cultural resources are likely to have been previously identified and addressed (or already disturbed), thereby eliminating potential biological or cultural resource impacts;
- 3) The traffic impact (if any) would be limited and not exceed the capability of existing road networks;
- 4) Construction would be limited to a type and scale that does not exceed construction already existing in the area;
- 5) Construction would be conducted in accordance with applicable SOPs and BMPs;
- 6) Indirect (cumulative) impacts from associated infrastructure (e.g., utilities) would be limited in scope; and
- 7) Certain types of facilities with potentially significant impacts, e.g., solid or hazardous waste facilities, are excluded from this CATEX.

Since new construction or improvements on land could involve numerous considerations, the Team took great care to establish limiting provisions to avoid the potential for significant impacts to the human environment. The limiting provisions were established based on similar limiting provisions found in other Federal agencies CATEXs or were added based on experience of MDA environmental staff to further avoid the potential for significant impacts to the human environment.

The Team recognized this CATEX could involve actions involving one or more extraordinary circumstances (i.e., would adversely affect public health or safety; threatens a violation of Federal, state, or local environmental laws; or involves a site that includes wetlands not covered by a nation-wide or regional permit, endangered or threatened species, historical or archeological resources or hazardous wastes; etc.). Therefore, to ensure only those actions having negligible impacts on the human environment are contemplated, the Team proposed a REC be prepared to document no extraordinary circumstances exist and all CATEX use criteria are met, or whether the action requires further analysis through the NEPA process.

As documented in Table B-18.1 and B-18.2, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;
- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;
- 4) Extraordinary circumstances associated with its application are absent and documented by a REC; and
- 5) No known significant impacts are associated with this proposed activity, beyond those resulting from accidental fuel spills during fueling activities, which are unplanned actions. Potential impacts are mitigated using spill containment equipment and SOPs.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusion and Administrative Record**

#### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(c)(1) Construction of an addition to an existing structure or new construction on a previously undisturbed site if the area to be disturbed has no more than 5.0 cumulative acres of new surface disturbance. This does not include construction of facilities for the transportation, distribution, use, storage, treatment, and disposal of solid waste, medical waste, and hazardous waste (REC required).

(e)(4) Modification, product improvement, or configuration engineering design change to materiel, structure, or item that does not change the original impact of the materiel, structure, or item on the environment (REC required).

#### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(14) Alteration of and additions to existing buildings, facilities, structures, vessels, aircraft, and equipment to conform or provide conforming use specifically required by new or existing applicable legislation or regulations (e.g., hush houses for aircraft engines, scrubbers for air emissions, improvements to storm water and sanitary and industrial wastewater collection and treatment systems, and installation of firefighting equipment).

(15) The modification of existing systems or equipment when the environmental effects will remain substantially the same and the use is consistent with applicable regulations.

(34) New construction that is similar to existing land use and, when completed, the use or operation of which complies with existing regulatory requirements (e.g., a building within a cantonment area with associated discharges/runoff within existing handling capacities).

#### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.8. Performing interior and exterior construction within the 5-foot line of a building without changing the land use of the existing building.

A2.3.14. Installing on previously developed land, equipment that does not substantially alter land use (i.e., land use of more than one acre). This includes outgrants to private lessees for similar construction. The EPF must document application of this CATEX on AF Form 813.

#### **U.S. Coast Guard**

**Reference:** *COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions*

(11) New construction in heavily developed portions of U.S. Coast Guard (USCG) property, when construction, use and operation will comply with regulatory requirements and constraints. (Checklist required).

#### **Federal Emergency Management Agency**

**Reference:** *44 CFR 10.8 (d) (2)*

(x) Routine maintenance, repair, and grounds-keeping activities at FEMA facilities.

(xv) Repair, reconstruction, restoration, elevation, retrofitting, upgrading to current codes and standards, or replacement of any facility in a manner that substantially conforms to the preexisting design, function, and location; [SE, in part].

(xvi) Improvements to existing facilities and the construction of small scale hazard mitigation measures in existing developed areas with substantially completed infrastructure, when the immediate project area has already been disturbed, and when those actions do not alter basic functions, do not exceed capacity of other system components, or modify intended land use; provided the operation of the completed project will not, of itself, have an adverse effect on the quality of the human environment;

**Reference: *Ground Operations and Testing in Support of the Airborne Laser (ABL) Program at Edwards Air Force Base, California Environmental Assessment, May 2001, resulting in a FONSI***

This EA evaluated the proposed construction and renovation activities and chemical storage at Edwards AFB for the ABL Program. The proposed action was the construction and modification of the buildings that accommodate ABL ground operations, which included modification of the hangar to accommodate the 747 jet, laser installation, operational system check-out, construction of the Integrated Maintenance Facility (IMF) and installation of a toxic vapor capture system and/or a suitable heating, ventilation and air conditioning system.

The above construction activities could result in impacts to air quality, safety and occupational health, hazardous materials and waste, biological resources and geology and soils. Based on the finding of this environmental assessment and the mitigation which would be utilized during construction and operations, no significant impact would occur from the proposed action. This program was dismantled in 2011 without any observed adverse environmental impacts during construction or operation of the program.

#### **Missile Defense Agency Environmental Reviews**

**Reference: *Ground-Based Midcourse Defense (GMD) Initial Defensive Operations Capability (IDOC) at Vandenberg AFB Environmental Assessment, August 2003, resulting in a FONSI***

Summary of Analysis as it pertains to this CATEX: Facility Modification and New Construction

The proposed action would use and/or modify four existing missile silos and other supporting facilities at Vandenberg AFB as part of the GMD IDOC. Several of these facilities may require interior modifications and the installation of additional infrastructure (i.e., security fencing, lighting, communications lines, water line upgrades, re-grading for proper storm drainage, septic tank and leach field, etc.).

Fourteen broad areas were evaluated in the environmental analysis and MDA determined no significant impacts would occur from activities associated with the Proposed Action.

Over eight years after modification and construction of these facilities, no adverse environmental impacts have been observed.

**Reference:** *Mobile Sensors Environmental Assessment, September 2005, resulting in a FONSI*

MDA prepared this EA to evaluate the potential environmental impacts of the use of mobile sensors (i.e., radar, telemetry, command and control, and optical systems) from land-based platforms and the use of airborne sensor systems. Land-based mobile sensors would be installed primarily on previously disturbed land or areas of similar land use. Land-based mobile sensors could be sited at numerous locations.

An analysis of the proposed action concluded there are no significant short-term or long-term effects to the environment or surrounding populations. MDA has conducted numerous test activities using mobile sensors in many locations including Alaska, Wake Island, and Hawaii. No adverse environmental impacts have been observed with site preparations of these assets.

**Reference:** *Relocatable In-Flight Interceptor Communications System Data Terminal (RIDT) #2 at Vandenberg Air Force Base Supplemental Environmental Assessment, November 2007, resulting in a FONSI*

The proposed action is to construct and operate a second RIDT at a site adjacent to the existing RIDT along El Rancho Road on Vandenberg AFB. Construction of the second RIDT would include installation of a Relocatable IDT and communications equipment, within shelters, on concrete pads; backup power generator and uninterruptable power supply; communications hut; storage facility for spares; an above ground water tank for fire suppression, with on-site distribution system; and installation of a septic system for the existing ISFAC.

The existing RIDT physical security facilities, including the fence, lighting, and sensors would be extended to surround the proposed second RIDT. Communications lines would be extended from an existing power line along El Rancho Road, including a cross connection with the existing RIDT. The lines would be placed in a buried flexible conduit, to be installed via trenching. Commercial power would be brought to the second RIDT from an existing power line along the east side of El Rancho Road. The new line would be installed by a combination of boring and trenching. A new water line with pump station would be required to provide water sufficient for fire fighting. Trenching for the water line would be required and buried power lines would be extended to the new pump station from the second RIDT site.

Based on analysis of the proposed construction and operation of a second RIDT at Vandenberg AFB, this SEA identified no significant impacts affecting the quality of the human environment. No adverse environmental impacts were observed at this site during construction or since.

**Reference: *REC Booster Vehicle (BV) Assembly Operations at Lockheed Martin Facilities, Courtland, AL, July 2002. Qualifies for Army CATEX (C)(1).***

The proposed action was to make minor modifications to the existing Ordnance Building by: 1) installing an electric motor to a manually-operated bay door; 2) enhancing the compressed air system; 3) adding a 10 x 12 foot concrete pad adjacent to the building for the compressed air system; and 4) modifying an existing truck loading dock. A new test cell building (40 x 100 feet) would also be constructed.

**Reference: *AF 813 TPS-X Radar Deployment/Use, September, 2002. Qualifies for Air Force CATEX A2.3.14.***

The proposed action included among other things: installation of a chain link perimeter fence, construction of a small concrete pad for a transformer or portable transformer trailer, siting of two modular offices with built-in toilet facilities with connection to local sewer or septic system.

**Reference: *REC Russian-American Observation Satellites (RAMOS), May 2003. Qualifies for Air Force CATEX A2.3.8.***

The proposed action among other things was to conduct equipment modifications to existing equipment at Utah State University, Space Dynamics Lab and Arnold Engineering Development Center.

**Reference: *RCE White Sands Missile Range Missile Assembly Facility Upgrades for STANDARD Missile 3 Support, August, 2003. Qualifies for Navy CATEX (34).***

The proposed action included the construction of a 9,182 square foot addition and improvements to the electrical and HVAC systems in the existing Missile Assembly Facility N300.

**Reference: *RCE Transportable Telemetry System Naval Air Station, Whidbey Island, Washington, April 2004. Qualifies for Navy CATEX (f)(34).***

The proposed action included installing and upgrading existing utility and communication lines including minor trenching; replacing an existing transformer and utility connections installed in the parking area of Building 27; constructing several concrete footings in the parking area to act as supports and tie-downs for antennas; and several other minor actions.

**Reference: *AF 813 Construct and Operate Component Repair Laboratory in Bldg 369 (IMF) at Edwards AFB, May 2004. Qualifies for AF CATEX A2.3.8 and A2.3.14.***

The southwest bay of Building 269 at Edwards AFB would be modified into an approximately 1,100 square foot fluid component repair and cleaning shop. A clean room would also be installed.

**Reference: *REC Construction and Operation of an Ancillary Radar Site at the Pacific Missile Range Facility, August 2004. Qualifies for Navy CATEX (f)(34).***

The proposed action was to add a 60 x 80 meter, ancillary hardstand immediately east of and parallel to the primary THAAD hardstand. The ancillary radar site would also include a small storage building, limited fencing and a vehicle access road. All of these alterations would be made within the existing THAAD radar site footprint.

**Reference: *RCE MDA – 510, Telemetry Building at the Pacific Missile Range Facility (PMRF), Makaha Ridge, Kauai, HI, April 2005. Qualifies for Navy CATEX (34).***

The proposed action was to erect a 2,000 square foot stand alone pre-engineered building at the PMRF Makaha Ridge telemetry complex.

**Reference: *AF 813 Temporary Use of Transportable Telemetry Equipment at Eareckson AFS in support of Flight Test 04-5, August 2005. Qualifies for Air Force CATEX A2.3.14.***

The proposed action was to temporarily install and operate two transportable telemetry dishes and van; one telemetry van and one storage van; two SATCOM trailers with antennae; two 60 kW diesel electric generators with double-walled fuel tanks; and two connex trailers on previously disturbed land to support FT-4-5 mission.

**Reference: *REC GMD Entry Control Facility Relocations at Fort Greely, AK, August 2005. Qualifies for Army CATEX (C)(1).***

The proposed action among other things was for clearing and grubbing of up to five acres of land and construction of a new entry control facility and parking lot.

**Reference: *AF813 Removal of Utilities and Walls between Bays 1, 2, and 3 in Building 151 at Edwards AFB, October 2005. Qualifies for Air Force CATEX A2.3.8.***

The proposed action was to remove utilities and wall between bays 1, 2, and 3 to allow the ABL program to proceed with future activities at this facility without unnecessary restrictions.

**Reference: *REC Construct Concrete Storage Pads at Wake Island, August 2006. Qualifies for Air Force CATEX A2.3.14.***

The proposed action was to construct two 20 x 50 foot concrete storage pad on previously disturbed areas.

**Reference: *REC Theater High Altitude Area Defense Radar Pad Extension at PMRF, September 2006. Qualifies for Navy CATEX (34).***

The proposed action is to construct a 30 x 30 meter pad to move the radar forward. The pad extension would require modifications of the Protective Distribution System (PDS), which includes lightning protection and grounding systems. Modifying the PDS would require approximately 60 feet of trenching. All construction activities would occur in previously disturbed areas.

**Reference: *AF 813 KEI Booster Flight Vehicle Integration at Building 6527, December 2006. Qualifies for Air Force CATEX A2.3.8.***

The proposed action included: removing an existing clean room from the high-bay and erect a temporary tent enclosure on the exterior of the main bay door to provide additional floor space for the fully integrated vehicle.

**Reference: *REC Entry Control Facility #1 Modification, Missile Defense Complex, Ft. Greely, AK, March 2007. Qualifies for Army CATEX (c)1.***

The proposed action was to alter/add to the existing Entry Control Facility (ECF) #1 by: 1) altering existing areas to enable parking of security reaction vehicles; 2) adding approximately 1,650 square feet to the ECF for an office and operations area; 3) adding approximately 2,300 square feet of special purpose assembly space; 4) constructing a 25 x 50 foot leach field and installing a 2,000 gallon septic tank; and 5) adding water, sewer, gas, and electric utility service; paving, sidewalks, curbs and gutters; storm drainage; fire protection/alarm system; and communications systems to supporting facilities.

**Reference: *REC AN/TPY-2 Radar Deployment at the Ted Stevens Marine Research Institute (TSMRI) on the National Oceanic and Atmospheric Administration (NOAA) Site in Juneau, Alaska in Support of Flight Test Ground-Based Interceptor (FTG) -04, May 2007. Qualifies for Army CATEX (C)(1).***

The proposed action among other things was to install a temporary security fence up to 8 feet tall; install temporary 12 feet tall noise attenuation barriers; grade, fill and compact 1 to 2 acres hardstand area; install two 6-foot satellite dishes for communication; and trim and/or top trees in approximately 1 acre of coastal fringe forest.

**Reference: *AF 813 XTR-1 Radar Site Preparations, Integration, and Testing at Massachusetts Institute of Technology Lincoln Laboratory (MIT/LL), June 2007. Qualifies for Air Force CATEX A2.3.14.***

The proposed action is to construct a new 20 x 20 feet concrete pad. A few small trees (less than 2 inches in diameter) in a previously disturbed area adjacent to the proposed concrete pad may be removed. A perimeter security fence will be installed around the project area.

**Reference: AF 813 MDA/GMD, Vandenberg AFB – LF-23 (Bldg 1964) Pad Extension, August 2007. Qualifies for Air Force CATEX A2.3.8.**

The proposed action was to extend the existing concrete pad an additional 20.8 feet to support the Strongback. The existing asphalt would be saw cut and replaced with concrete.

**Reference: AF 813 Ballistic Missile Defense System Communications Support Complex – Transportable (BCSC-T), February 2008. Qualifies for CATEX AF A2.3.14.**

The proposed action was to temporary site a transportable communications package consisting of three distinct transportable components: a protected communication control system, SATCOM, and power on previously disturbed land.

**Reference: AF 813 MDA/GMD Extended Test Range - VAFB LF-24 Mods for Test, August 2008. Qualifies for Air Force CATEX A2.3.14.**

The proposed action included the installation of a re-rad tower, installation of a guard shack with associated power and communications, and repaving of Parquee Road, the facility access road.

**Reference: AF 813 MDA Modification of Bldg 988 for Administrative Space, March 2009. Qualifies for Air Force CATEX A2.3.8.**

The proposed action among other things included: 1) demolish interior dividers, flammable storage locker, elevated storage area, and the boiler room structure, 2) demolish east-side building addition and concrete tank and sump, 3) repair roof and exterior siding, 4) install new interior architectural walls, doors, and associated items to create administrative areas, and 5) upgrade existing restroom.

**Reference: AF 813 MDA- Lightning Protection System (LPS) Upgrades, March 2009. Qualifies for Air Force CATEX A2.3.8.**

The proposed action included: 1) replacement of existing LPS equipment, 2) installation of new LPS equipment on existing facilities, 3) replacement of existing wooden poles and grounding rods, 3) installation of new poles and grounding rods, 4) connection of new and replaced equipment to the existing buried grounding system, and 5) removal of radio frequency towers at nine facilities at VAFB.

**Reference: AF 813 AN/TPY-2 Radar Deployment at Wake Island in support of MDA Ballistic Missile Defense Systems (BMDS) Flight Tests, November 2009. Qualifies for Air Force CATEX A2.3.14.**

The proposed action was to site, set up, calibrate and operate the AN/TPY-2 Radar, Defense Satellite Communication System, Transportable Telemetry System and

supporting communications equipment on previously disturbed land on Wake Island. Minor site clearing and preparation would occur and all cabling would either use existing buried conduit or be laid on the ground in protected cable trays.

**Reference: *RCE Construction of a Deckhouse Support Building, Relocatable Deckhouse, Installation and Checkout of an Aegis Ashore Weapons System at Lockheed Martin Mission Systems and Sensors (MS2), Moorestown, New Jersey, May 2011. Qualifies for Navy CATEX (f)(34).***

The proposed action among other things included: 1) grading, filling and compaction of approximately nine acres; 2) construction of a Deckhouse Support Building and installation of a relocatable Deckhouse with a footprint of approximately 1.4 acres; 3) use of a lay-down/staging area comprised of approximately 3 acres; 4) excavation for utilities to connect to existing utilities; and 5) construction of a separate, temporary construction site entrance.

**Reference: *REC Installation of Water Line along Mills Road and Relocation of Parking Lot and Ring Road North of Von Braun Complex, May 2012. Qualifies for Army CATEX (c)1.***

The proposed action consisted of installing a 12 inch water line at the intersection of Neal Rd and Mills Rd to Von Braun IV; demolishing the existing ring road and relocation to the north, towards Neal Road; and construction of a new parking area. Total disturbance would be approximately 4.4 acres.

**Reference: *AF 813 MDA Consolidated Interceptor Facility at Building 1819 at VAFB, August 2012. Qualifies for Air Force CATEX A2.3.8.***

The proposed action included among other things internal minor modifications and upgrades: 1) Removal of two small Peacekeeper-related items; 2) Installation and mounting of two missile “jack-able rail” work stands and installation of two portable “clean enclosures” around missile work stands; 3) Electrical upgrades; 4) Communication upgrades; 5) Security upgrades; and 6) Hypergol detection system installation.

**Table B- 18.1 Comparative Analysis of MDA CATEX B-18 to Other Agency CATEXs.**

Benchmarking Categories	MDA	U.S. Army	U.S. Navy	U.S. Air Force	U.S. Coast Guard	Notes
Applicable CATEXs	B-18	(c)(1) and (e)(4)	(f)(14), (15) and (34)	A2.3.14 and A2.3.8	(11)	
Characteristics of the Action	<p>New construction or equipment installation or alterations (interior and exterior) to or construction of an addition to an existing structure that is similar to existing land use if the area to be disturbed has no more than 5.0 cumulative acres of new surface disturbance. The following conditions must be met:</p> <p>a) The site is in a developed area and/or previously disturbed site,  g) The structure and proposed use are compatible with applicable Federal, tribal, state and local planning and zoning standards.  h) The proposed use will not increase vehicular traffic beyond the capacity of the supporting road network to accommodate such an increase,  i) The site and scale of construction or improvement is consistent with those of existing, adjacent, or nearby buildings, and,  j) The construction or improvement will not result in uses that exceed existing support infrastructure capacities (roads, sewer, water, parking, etc.).  This does not include construction of facilities for the transportation, distribution, use, storage, treatment, and disposal of solid waste or hazardous waste. (REC required).</p>	<p>Proposed action is limited to (c)(1) Construction of an addition to an existing structure or new construction on a previously undisturbed site if the area to be disturbed has no more than 5.0 cumulative acres of new surface disturbance. This does not include construction of facilities for the transportation, distribution, use, storage, treatment, and disposal of solid waste, medical waste, and hazardous waste (REC required).</p> <p>(e)(4) Modification, product improvement, or configuration engineering design change to materiel, structure, or item that does not change the original impact of the materiel, structure, or item on the environment (REC required).</p> <p>MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, USAKA; WSMR, NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.</p>	<p>Proposed action is limited to (14) Alteration of and additions to existing buildings, facilities, structures, vessels, aircraft, and equipment to conform or provide conforming use specifically required by new or existing applicable legislation or regulations (e.g., hush houses for aircraft engines, scrubbers for air emissions, improvements to storm water and sanitary and industrial wastewater collection and treatment systems, and installation of firefighting equipment).</p> <p>(15) The modification of existing systems or equipment when the environmental effects will remain substantially the same and the use is consistent with applicable regulations.</p> <p>(34) New construction that is similar to existing land use and, when completed, the use or operation of which complies with existing regulatory requirements (e.g., a building within a cantonment area with associated discharges/runoff within existing handling capacities).</p> <p>MDA has extensive experience working at U.S. Navy installations such as PMRF, HI; Point Mugu Sea Range, CA; San Nicolas Island, CA; and Dahlgren Naval Base, VA.</p>	<p>Proposed action is limited to A2.3.8. Performing interior and exterior construction within the 5-foot line of a building without changing the land use of the existing building.</p> <p>A2.3.14. Installing on previously developed land, equipment that does not substantially alter land use (i.e., land use of more than one acre). This includes outgrants to private lessees for similar construction. The EPF must document application of this CATEX on AF Form 813.</p> <p>MDA has extensive experience working at U.S. Air Force Installations such as Vandenberg AFB, CA; Edwards AFB, CA; Wake Island; Clear AFS, AK; Elmendorf AFB, AK; Eareckson AFS, AK; and Schriever AFB, CO.</p>	<p>Proposed action is limited to new construction in heavily developed portions of USCG property, when construction, use and operation will comply with regulatory requirements and constraints. (Checklist required).</p>	<p>Environmental impacts are limited by:</p> <ol style="list-style-type: none"> <li>1) Actions are limited to previously disturbed sites or to new construction not exceeding 5 acres of new surface disturbance and land use is similar to existing land uses where no significant biological or cultural resources have been found to be present, thereby eliminating potential biological or cultural resource impacts.</li> <li>2) The activity is of a type already approved for the particular area by installation management plans and is thereby compatible with existing land use.</li> <li>3) The traffic impact would be limited.</li> <li>4) Construction would be limited to a type and scale that does not exceed construction already existing in the area.</li> <li>5) Indirect (cumulative) impacts through associated infrastructure are also limited in scope.</li> <li>6) Certain types of facilities with potentially significant impacts, i.e. solid or hazardous waste facilities are excluded from this CATEX.</li> </ol>
Methods of Implementing the Action	<p>Work with host installation or private property owner to identify applicable laws, regulations, management plans and SOPs and existing natural and cultural resources and areas of known environmental contamination.</p> <p>Work with host installation or property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation or property owner to conduct any required coordination with Federal and state agencies.</p> <p>Work with host installation to conduct any required site preparation activities.</p>	<p>Installation staff would identify applicable laws, regulations, management plans and SOPs and existing natural and cultural resources and areas of known environmental contamination.</p> <p>Installation staff would either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Installation staff would conduct any required coordination with Federal and state agency.</p> <p>Installation staff to conduct any required site preparation activities.</p>	Same	Same	Similar	All these activities are conducted according to defined protocols that are fundamentally consistent across Federal agencies and by certified or otherwise qualified professionals.
Frequency of the Actions	Generally one time in one area.	Same	Same	Same	Same	

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Navy</b>	<b>U.S. Air Force</b>	<b>U.S. Coast Guard</b>	<b>Notes</b>
<b>Applicable Regulations</b>	NEPA, ESA, NHPA, ARPA, CERCLA, CWA, CAA, and other applicable Federal and state regulations, DoD and Military Service requirements, and industry standards.	Same, plus UES	Same	Same	Same	
<b>Applicable SOPs</b>	Installation/Manufacturer specific and BMPs	Same	Same	Same	Same	
<b>Timing and Context</b>	Construction could occur any time of year in warm climates, but not winter time in Arctic areas.  MDA activities are conducted at host installations with same types of ongoing operations. MDA relies on installations infrastructure.	Same	Same	Same	Same	
<b>Extraordinary Circumstances</b>	Follow-on intrusive investigations and actions could be required if sensitive environmental, historical/cultural/biological resources, or hazardous material present, but would be covered by another appropriate CATEX or NEPA analysis.	Same	Same	Same	Same	
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these types of operations.	Same	Same	Same	Unknown (but expected to be similar)	

**Table B-18.2 Comparative Analysis of MDA CATEX B-18 to MDA Environmental Analyses.**

Benchmarking Categories	MDA	Ground Operations and Testing in Support of the Airborne Laser (ABL) Program at Edwards Air Force Base, California Environmental Assessment, May 2001, FONSI Signed	Ground-Based Midcourse Defense (GMD) Initial Defensive Operations Capability (IDOC) at Vandenberg AFB Environmental Assessment, August 2003, FONSI Signed	Mobile Sensors Environmental Assessment, September 2005, FONSI Signed	Relocatable In-Flight Interceptor Communications System Data Terminal (IDT) #2 at Vandenberg Air Force Base, Supplemental Environmental Assessment, November 2007, FONSI Signed
Applicable CATEXs	B-18				
<b>Characteristics of the Action</b>	<p>New construction or equipment installation or alterations (interior and exterior) to or construction of an addition to an existing structure that is similar to existing land use if the area to be disturbed has no more than 5.0 cumulative acres of new surface disturbance. The following conditions must be met:</p> <p>a) The site is in a developed area and/or previously disturbed site,</p> <p>g) The structure and proposed use are compatible with applicable Federal, tribal, state and local planning and zoning standards.</p> <p>h) The proposed use will not increase vehicular traffic beyond the capacity of the supporting road network to accommodate such an increase,</p> <p>i) The site and scale of construction or improvement is consistent with those of existing, adjacent, or nearby buildings, and,</p> <p>j) The construction or improvement will not result in uses that exceed existing support infrastructure capacities (roads, sewer, water, parking, etc.).</p> <p>This does not include construction of facilities for the transportation, distribution, use, storage, treatment, and disposal of solid waste or hazardous waste. (REC required).</p>	<p>Proposed project activities in this environmental assessment would be located Edwards AFB. The proposed action was the construction and modification of the buildings that accommodate ABL ground operations, which includes modification of the hangar to accommodate the 747, laser installation, operational system check-out, construction of the IMF and installation of a toxic vapor capture system and/or a suitable heating, ventilation and air conditioning system.</p>	<p>MDA prepared this EA to evaluate the potential environmental impacts of facility modifications and new construction in order to use and/or modify four existing missile silos and other supporting facilities at Vandenberg AFB as part of the GMD IDOC.</p>	<p>MDA prepared this EA to evaluate the potential environmental impacts of the use of mobile sensors (i.e., radar, telemetry, command and control, and optical systems) from land-based platforms and the use of airborne sensor systems. Land-based mobile sensors would be installed primarily on previously disturbed land or areas of similar land use. Land-based mobile sensors could be sited at numerous locations</p>	<p>Numerous proposed activities were analyzed, including construction of a second RIDT; communications equipment within shelters on concrete pads; backup power generator and uninterruptable power supply; communications hut; storage facility for spares; an above ground water tank for fire suppression, with on-site distribution system; and installation of a septic system for the existing ISFAC.</p>
<b>Methods of Implementing the Action</b>	<p>Work with host installation to identify applicable laws, regulations, management plans and SOPs and existing natural and cultural resources and areas of known environmental contamination.</p> <p>Work with host installation or private property owner to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation or private property owner to conduct any required coordination with Federal and state agencies.</p> <p>Work with host installation or private property owner to conduct any required site preparation activities.</p>	Same	Same	Same	Same
<b>Frequency of the Actions</b>	Generally one time in one area.	Same	Same	Same	Same
<b>Applicable Regulations</b>	NEPA, ESA, NHPA, ARPA, CERCLA, CWA, CAA, and other applicable Federal and State Regulations, DoD and Service requirements, and industry standards.	Same	Same	Same	Same
<b>Applicable SOPs</b>	Installation/Manufacturer specific and BMPs	Same	Same	Same	Same

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>Ground Operations and Testing in Support of the Airborne Laser (ABL) Program at Edwards Air Force Base, California Environmental Assessment, May 2001, FONSI Signed</b>	<b>Ground-Based Midcourse Defense (GMD) Initial Defensive Operations Capability (IDOC) at Vandenberg AFB Environmental Assessment, August 2003, FONSI Signed</b>	<b>Mobile Sensors Environmental Assessment, September 2005, FONSI Signed</b>	<b>Relocatable In-Flight Interceptor Communications System Data Terminal (IDT) #2 at Vandenberg Air Force Base, Supplemental Environmental Assessment, November 2007, FONSI Signed</b>
<b>Applicable CATEXs</b>	B-18				
<b>Timing and Context</b>	Construction could occur any time of year in warm climates, but not winter time in Arctic areas.  MDA activities are conducted at host installations with same types of ongoing operations. MDA relies on installations infrastructure.	Same	Same	Same	Same
<b>Extraordinary Circumstances</b>	Follow-on intrusive investigations and actions could be required if sensitive environmental, historical/cultural/biological resources, or hazardous material present, but would be covered by another appropriate CATEX or NEPA analysis.	Same	Same	Same.	Same.
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these types of operations.	MDA is in the process of decommissioning this facility and no significant environmental impacts were observed as a result of the actions.	No significant environmental impacts have been observed as a result of MDA's refurbishment and the missile silos and supporting facilities at VAFB.	MDA has placed numerous mobile sensors on previously disturbed land or land with similar land uses and no significant environmental impacts have been observed.	No significant environmental impacts have been observed as a result of MDA's construction of the IDT #2 and supporting facilities.

**B-19. Demolition of non-historic buildings, structures, or other improvements and repairs that result in disposal of debris there-from, or removal of a part thereof for disposal, in accordance with applicable regulations, including those regulations applying to removal of asbestos containing materials (ACM), polychlorinated biphenyls (PCBs), lead-based paint (LBP), and other special hazard items. (REC required.)**

The types of activities contemplated by this CATEX are usual and customary activities routinely conducted on host installations, ranges or at commercial facilities and conform to the host/property owner's master plans for the site. The activities would be performed in compliance with applicable environmental and safety requirements regarding the removal of ACM, PCBs, LBP and other hazardous substances ensuring proper handling, removal and disposal of these substances as well as control of potentially harmful air emissions. The activities would only occur in non-historic structures thereby preventing any impact to historic structures.

The Team found the U.S. Army, Navy, U.S. Coast Guard (USCG) and Federal Emergency Management Agency (FEMA) had CATEXs for the activities of removal or demolition, along with subsequent disposal of debris to permitted or authorized off-site locations, of non-historic buildings, structures, other improvements and/or equipment. The Army, Navy and USCG may perform these types of activities on U.S. government property under its control, while the FEMA may authorize the performance of this type of activity through a public assistance program anywhere in the U.S. as a part of response and recovery to disasters. CATEXs from FEMA include public assistance programs to be implemented in any part of the U.S. to assist in preparing and recovering from a disaster.

MDA performs activities similar to the Army and Navy. The environmental assessments and FONSIIs below describe some of those activities. Based upon this history of environmental analyses, the Team found actions of a similar nature, scope and intensity were performed by MDA without significant environmental impacts.

Since removal or demolition, along with subsequent disposal of debris, of non-historic buildings, structures, other improvements and/or equipment could involve numerous considerations, the Team proposed that a REC be prepared to document no extraordinary circumstances exist and all CATEX use criteria are met or whether the action requires further analysis with an EA or EIS. In particular, the Team wanted to ensure the activities contemplated in this CATEX were performed in compliance with applicable environmental and safety requirements.

As documented in Table B-19.1 and B-19.2, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;

- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;
- 4) Extraordinary circumstances associated with its application are absent and documented by a REC; and
- 5) No known significant impacts are associated with this proposed activity, beyond those resulting from accidental fuel spills during fueling activities, which are unplanned actions. Potential impacts are mitigated using spill containment equipment and SOPs.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusion and Administrative Record**

#### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(c)(2) Demolition of non-historic buildings, structures, or other improvements and disposal of debris there from, or removal of a part thereof for disposal, in accordance with applicable regulations, including those regulations applying to removal of asbestos, polychlorinated biphenyls (PCBs), lead-based paint, and other special hazard items (REC required).

#### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(35) Demolition, disposal, or improvements involving buildings or structures when done in accordance with applicable regulations including those regulations applying to removal of asbestos, PCBs, and other hazardous materials.

#### **U.S. Coast Guard**

**Reference:** *COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions*

(13) Demolition or disposal actions that involve buildings or structures when conducted in accordance with regulations applying to removal of asbestos, PCB's and other hazardous materials, or disposal actions mandated by Congress. In addition, if the building or structure is listed or eligible for listing, in the National Register of Historic Places, then compliance with section 106 of the National Historic Preservation Act is required. (Checklist required)

## **Federal Emergency Management Agency**

**Reference: 44 CFR § 10.8 (d) (2)**

(xii) Demolition of structures and other improvements or disposal of uncontaminated structures and other improvements to permitted off-site locations, or both;

(xiii) Physical relocation of individual structures where FEMA has no involvement in the relocation site selection or development

## **Department of Energy**

**Reference: 10 CFR 1021**

B1.23. Demolition and subsequent disposal of buildings, equipment, and support structures (including, but not limited to, smoke stacks and parking lot surfaces).

## **Missile Defense Agency Environmental Reviews**

**Reference: *Draft Dismantlement or Destruction of Anti-Ballistic Missile Facilities, Stanley R. Mickelsen Safeguard Complex (SRMSC), North Dakota, Environmental Assessment, October 1999***

The EA analyzed the proposal for the dismantlement or destruction (D/D) of some or all of the SRMSC facilities. ACM is found throughout facilities that would be dismantled or destroyed. A certified asbestos abatement contractor would remove and dispose of the ACM in accordance with Federal, state, and local requirements. The facilities that would be dismantled or destroyed may have been painted with LBP. Prior to disposal, the debris would be sampled to characterize the lead hazard in order to determine proper disposal procedures and locations. Regulated PCB equipment or contaminated debris found in the PAR building would follow the same characterization and disposal process as LBP debris. Water contaminated with chromium (or other pollutants) found in the Sprint or Spartan launchers would be removed, treated, and disposed of in accordance with applicable requirements. All hazardous materials and waste would be handled in accordance with Federal, state, and local requirements. If an NMD system is deployed at the SRMSC and new construction associated with deployment takes place concurrent with DoD activities, negligible increases in the use and generation of hazardous materials and waste could occur. During new NMD construction, all hazardous materials and waste would also be handled in accordance with Federal, state, and local requirements.

Fourteen broad areas of environmental analysis were considered and the resulting environmental analysis showed that no significant impacts would occur from the proposed dismantlement and destruction activities.

**Reference: *Alternate Boost Vehicle (ABV) Verification Tests Environmental Assessment, August 2002, resulting in a FONSI***

This EA analyzed among other things, the removal and abatement of LBP, ACM, and PCBs as required before facility modifications occurred. The ABV program would perform sampling and abatement for LBP, ACM, and PCBs as required prior to modification, using Vandenberg AFB-approved procedures. If any of the modifications

require the removal of these hazardous wastes, they would be properly disposed of in accordance with VAFB-approved plans developed by ABV program personnel, federal and state regulations, and the VAFB Hazardous Waste Management Plan.

Eleven broad resource areas were evaluated and based on the findings of this EA; no significant impacts would result from the proposed action. No adverse environmental impacts have been observed.

**Reference:** *Ground-Based Midcourse Defense (GMD) Initial Defensive Operations Capability (IDOC) at Vandenberg Air Force Base, August 2003, resulting in a FONSI*

This EA analyzed among other things, the removal and abatement of LBP, ACM, PCBs and other hazardous substances as required before facility modifications occurred. The GMD program would perform sampling and abatement for LBP, ACM, PCBs and other hazardous substances as required. If any of the modifications require the removal of these hazardous wastes, they would be properly disposed in accordance with work plans developed by GMD personnel and approved by Vandenberg AFB 30th Civil Engineering Squadron/Environmental Management Flight.

Fourteen broad resource areas were evaluated and based on the findings of this EA; no significant impacts would result from the proposed action. No adverse environmental impacts have been observed.

**Reference:** *Draft Environmental Assessment for the Kinetic Energy Interceptor Initial Development and Test, April 2009*

This EA analyzed the proposed action to conduct site modifications to several buildings for use by KEI. Older buildings proposed for KEI activities may contain hazardous materials used in their construction, such as ACM and LBP. At VAFB, LBP and ACM are managed in accordance with 30 SW Plan 32-1002 (*Lead-Based Paint Management Plan*), 30 SW Plan 32-1052-A (*Asbestos Management Plan*), 32-1052-B (*Asbestos Operating Plan*), and other applicable Federal, state, local, and USAF requirements.

Any removal of hazardous materials from the buildings and facilities would require containerizing and proper disposal in accordance with VAFB's *Hazardous Waste Management Plan* (30 SW Plan 32-7043-A). Other non-hazardous construction and demolition debris would be managed in accordance with the disposal and recycling requirements specified in the base *Solid Waste Management Plan* (30 SW 32-7042).

Prior to replacement of the HVAC system at Building 960, any R-22 hydrochlorofluorocarbon refrigerant (a Class II ozone depleting substance) remaining in the old system would be recovered for proper disposal or reuse in accordance with AFI 32-7086 (AFSPC Supplement 1).

During site modifications/construction activities, potential impacts could occur from the accidental release of fuel, anti-freeze, and oil from construction equipment. To minimize potential impacts, the construction contractor would be required to prepare a hazardous

material Spill Prevention and Response Plan and obtain concurrence from the base Environmental Office. The plan would include the implementation of BMPs, such as daily inspections of construction vehicles and equipment for fluid leaks, secondary containment provisions for equipment fueling sites, and proper handling and disposal of vehicle wastes.

All hazardous materials and associated wastes would be responsibly managed in accordance with the well-established policies and procedures. All hazardous and non-hazardous wastes would be properly disposed of in accordance with applicable Federal, state, local, DoD, and USAF regulations.

An analysis of the proposed action concluded that its implementation will not have a significant environmental impact on the human and natural environment, either by itself or cumulatively with other actions. Due to changes in program priorities, this project was halted and a FONSI was not signed.

**Table B-19.1 Comparative Analysis of MDA CATEX B-19 to Other Agency CATEXs.**

Benchmarking Categories	MDA	U.S. Army	U.S. Navy	U.S. Coast Guard	Federal Emergency Management Agency	Notes
Applicable CATEXs	B-19	(c)(2)	(f)(35)	COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions (13)	44 CFR § 10.8 (d) (2) (xii) and (xiii)	
Characteristics of the Action	<p>Demolition or modification and repair of non-historic buildings, structures, or other improvements and repairs that result in disposal of debris there-from, or removal of a part thereof for disposal, in accordance with applicable regulations, including those regulations applying to removal of ACM, PCBs, LBP, and other special hazard items. (REC required.)</p> <p>The types of activities contemplated by this CATEX are usual and customary activities routinely conducted on host installations, ranges or at commercial facilities and conform to the host/property owner's master plans for the site.</p> <p>The activities would be performed in compliance with applicable environmental and safety requirements regarding the removal of ACM, PCBs, LBP and other hazardous substances ensuring proper handling, removal and disposal of these substances as well as control of potentially harmful air emissions.</p> <p>The activities would only occur in non-historic structures thereby preventing any impact to historic structures.</p>	<p>Proposed action is limited to demolition of non-historic buildings, structures, or other improvements and disposal of debris there from, or removal of a part thereof for disposal, in accordance with applicable regulations, including those regulations applying to removal of asbestos, PCBs, LBP, and other special hazard items (REC required).</p> <p>MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, USAKA; WSMR, NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.</p>	<p>Proposed action is limited to demolition, disposal, or improvements involving buildings or structures when done in accordance with applicable regulations including those regulations applying to removal of asbestos, PCBs, and other hazardous materials.</p> <p>MDA has extensive experience working at U.S. Navy installations such as PMRF, HI; Point Mugu Sea Range, CA; San Nicolas Island, CA; and Dahlgren Naval Base, VA.</p>	<p>Proposed action is limited to demolition or disposal actions that involve buildings or structures when conducted in accordance with regulations applying to removal of asbestos, PCB's and other hazardous materials, or disposal actions mandated by Congress. In addition, if the building or structure is listed or eligible for listing, in the National Register of Historic Places, then compliance with section 106 of the National Historic Preservation Act is required. (Checklist required).</p>	<p>Proposed action is limited to (xii) Demolition of structures and other improvements or disposal of uncontaminated structures and other improvements to permitted off-site locations, or both; (xiii) Physical relocation of individual structures where FEMA has no involvement in the relocation site selection or development</p>	
Methods of Implementing the Action	<p>Work with host installation or property owner to find suitable sites for waste disposal.</p> <p>Work with host installation or property owner to identify applicable laws, regulations, SOPs, BMPs, and reporting requirement.</p> <p>Work with host installation or property owner to either review existing documentation and/or to prepare necessary NEPA documentation.</p> <p>Work with host installation or property owner to conduct required consultations or obtain required permits and plans.</p> <p>Work with host installation or property owner to conduct any required site preparation activities.</p> <p>Record volumes of waste disposed of and track their disposal.</p>	<p>Installation personnel would find suitable sites for waste disposal.</p> <p>Installation personnel would identify applicable laws, regulations, SOPs, BMPs, and reporting requirement.</p> <p>Installation personnel would either review existing documentation and/or to prepare necessary NEPA documentation.</p> <p>Installation personnel would conduct required consultations or obtain required permits and plans.</p> <p>Installation personnel would conduct any required site preparation activities.</p> <p>Record volumes of waste disposed of and track their disposal.</p>	Same	Same	Similar	Modification and demolition of structures on host installations, test ranges and industrial/commercial property is a usual and customary activity, which conforms to the installation/range's Master Plan.

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Navy</b>	<b>U.S. Coast Guard</b>	<b>Federal Emergency Management Agency</b>	<b>Notes</b>
<b>Frequency of the Actions</b>	Relatively infrequent, especially relative to Military Services that control a much larger volume and extent of real estate.	Greater	Greater	Greater	Greater	Typical operations subject to conditions of installation's regulatory permits and master schedule.
<b>Applicable Regulations</b>	NEPA, CERCLA, RCRA, Toxic Substances Control Act (TSCA), CWA, CAA, biological and cultural resource protection regulations, and other applicable State Regulations.	Same, plus UES	Same	Same	Same	
<b>Applicable SOPs</b>	Installation/Manufacturer specific SOPs, BMPs, local building codes and ordinances.	Same	Same	Same	Same	
<b>Timing and Context</b>	Could occur any time of the year. MDA relies on installation's infrastructure and often their hazardous waste disposal contractors.	Same	Same	Same	Same	
<b>Extraordinary Circumstances</b>	The Team recognized this CATEX could involve actions involving one or more extraordinary circumstances (i.e., would adversely affect public health or safety; threatens a violation of Federal, state, or local environmental laws applicable to MDA; or involves a site that includes wetlands not covered by a nation-wide or regional permit, endangered or threatened species, historical or archeological resources or hazardous wastes.	Same	Same	Same	Same	
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these types of operations.	Same	Same	Same	Unknown (but expected to be similar)	

**Table B-19.2 Comparative Analysis of MDA CATEX B-19 to MDA Environmental Analyses.**

Benchmarking Categories	MDA	Draft Dismantlement or Destruction of Anti-Ballistic Missile Facilities, Stanley R. Mickelsen Safeguard Complex, North Dakota, Environmental Assessment, October 1999	Alternate Boost Vehicle (ABV) Verification Tests Environmental Assessment, August 2002, FONSI Signed	Ground-Based Midcourse Defense (GMD) Initial Defensive Operations Capability (IDOC) at Vandenberg Air Force Base Environmental Assessment, August 2003, FONSI Signed	Draft Kinetic Energy Interceptor Initial Development and Test Environmental Assessment, April 2009
Applicable CATEXs	B-19				
<b>Characteristics of the Action</b>	<p>Demolition or modification and repair of non-historic buildings, structures, or other improvements and repairs that result in disposal of debris therefrom, or removal of a part thereof for disposal, in accordance with applicable regulations, including those regulations applying to removal of asbestos, polychlorinated biphenyls (PCBs), lead-based paint, and other special hazard items. (REC required.)</p> <p>The types of activities contemplated by this CATEX are usual and customary activities routinely conducted on host installations, ranges or at commercial facilities and conform to the host/property owner's master plans for the site.</p> <p>The activities would be performed in compliance with applicable environmental and safety requirements regarding the removal of asbestos, PCBs, lead-based paint and other hazardous substances ensuring proper handling, removal and disposal of these substances as well as control of potentially harmful air emissions.</p> <p>The activities would only occur in non-historic structures thereby preventing any impact to historic structures.</p>	<p>The proposed action was the D/D of some or all of the SRMSC facilities. ACM is found throughout facilities that would be dismantled or destroyed. The facilities that would be dismantled or destroyed may have been painted with LBP and regulated PCB equipment or contaminated debris may be present in the PARB. Water contaminated with chromium (or other pollutants) found in the Sprint or Spartan launchers would be removed, treated, and disposed of in accordance with applicable requirements. All hazardous materials and waste would be handled in accordance with Federal, state, and local requirements.</p>	<p>The proposed action among other things, was conducting facility modifications including the removal and abatement of LBP, ACM, PCBs as required before facility modifications occurred. The ABV program would perform sampling and abatement for LBP, ACM, and PCBs as required prior to modification. If any of the modifications require the removal of these hazardous wastes, they would be properly disposed of in accordance with Vandenberg AFB-approved plans developed by ABV program personnel, federal and state regulations, and the Vandenberg AFB Hazardous Waste Management Plan.</p>	<p>The proposed action, among other things was the removal and abatement of LBP, ACM, PCBs and other hazardous substances as required before facility modifications occurred. The GMD program would perform sampling and abatement for LBP, ACM, PCBs and other hazardous substances as required. If any of the modifications require the removal of these hazardous wastes, they would be properly disposed in accordance with work plans developed by GMD personnel and approved by Vandenberg AFB 30th Civil Engineering Squadron/Environmental Management Flight.</p>	<p>The proposed action was to conduct site modifications to several buildings for use by KEI. Older buildings proposed for KEI activities may contain hazardous materials used in their construction, such as ACM and LBP. LBP and ACM would be managed in accordance with 30 SW Plan 32-1002 (<i>Lead-Based Paint Management Plan</i>), 30 SW Plan 32-1052-A (<i>Asbestos Management Plan</i>), 32-1052-B (<i>Asbestos Operating Plan</i>), and other applicable Federal, state, local, and USAF requirements.</p> <p>Any removal of hazardous materials from the buildings and facilities would require containerizing and proper disposal in accordance with Vandenberg AFB's <i>Hazardous Waste Management Plan</i>. Other non-hazardous construction and demolition debris would be managed in accordance with the disposal and recycling requirements specified in the base <i>Solid Waste Management Plan</i>.</p>
<b>Methods of Implementing the Action</b>	<p>Work with host installation or property owner to find suitable sites for waste disposal.</p> <p>Work with host installation or property owner to identify applicable laws, regulations, SOPs, BMPs, and reporting requirement.</p> <p>Work with host installation or property owner to either review existing documentation and/or to prepare necessary NEPA documentation.</p> <p>Work with host installation or property owner to conduct required consultations or obtain required permits and plans.</p> <p>Work with host installation or property owner to conduct any required site preparation activities.</p> <p>Record volumes of waste disposed of and track their disposal.</p>	Same	Same	Same	Same
<b>Frequency of the Actions</b>	Relatively infrequent, especially relative to Military Services that control a much larger volume and extent or real estate.	One time	One time - completed	One time - completed	One time

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>Draft Dismantlement or Destruction of Anti-Ballistic Missile Facilities, Stanley R. Mickelsen Safeguard Complex, North Dakota, Environmental Assessment, October 1999</b>	<b>Alternate Boost Vehicle (ABV) Verification Tests Environmental Assessment, August 2002, FONSI Signed</b>	<b>Ground-Based Midcourse Defense (GMD) Initial Defensive Operations Capability (IDOC) at Vandenberg Air Force Base Environmental Assessment, August 2003, FONSI Signed</b>	<b>Draft Kinetic Energy Interceptor Initial Development and Test Environmental Assessment, April 2009</b>
<b>Applicable CATEXs</b>	B-19				
<b>Applicable Regulations</b>	NEPA, CERCLA, RCRA, TSCA, CWA, CAA, biological and cultural resource protection regulations, and other applicable State Regulations.	Same	Same	Same	Same
<b>Applicable SOPs</b>	Installation/Manufacturer specific SOPs, BMPs, local building codes and ordinances.	Same	Same	Same	Same
<b>Timing and Context</b>	Could occur any time of the year. MDA relies on installation's infrastructure and often their hazardous waste disposal contractors.	Same	Same	Same	Same
<b>Extraordinary Circumstances</b>	The Team recognized this CATEX could involve actions involving one or more extraordinary circumstances (i.e., would adversely affect public health or safety; threatens a violation of Federal, state, or local environmental laws applicable to MDA; or involves a site that includes wetlands not covered by a nation-wide or regional permit, endangered or threatened species, historical or archeological resources or hazardous wastes.	Same	Same	Same	Same
<b>Known Impacts from Proposed Action</b>	After 20+ years of activities, MDA knows of no known significant impacts from these types of operations.	MDA did not locate facilities on this site, therefore did not dismantle any facilities	No adverse environmental effects have been observed from silo reactivation and supporting facility modification since project construction.	No adverse environmental effects have been observed from silo reactivation and supporting facility modification since project construction.	Due to changes in program priorities, this project was halted and a FONSI was not signed.

**B-20. Research, testing, and operations conducted at existing facilities and plants or laboratories (including contractor-operated laboratories and plants) and in compliance with all applicable safety, environmental and natural conservation laws. Examples include, but are not limited to: wind tunnels, high energy lasers, remote sensing instruments, vacuum chambers, high altitude simulator facilities, and propellant testing facilities.**

Research, development, testing, and evaluation (RDT&E) activities or laboratory operations contemplated by this CATEX are those that would be undertaken at facilities operating under stringent requirements designed to protect the quality of the human environment. Examples of these types of activities include research, testing and operation of sensors (radars) and their components, lasers, propellants, missile payloads, communication systems, simulated high altitude components and material testing. These requirements include strict operating procedures governing laboratory and plant operations and personnel responsibilities. These activities are conducted either at military facilities or government defense contractor owned facilities. These facilities have established and longstanding environmental programs governing air emissions, wastewater and storm water discharges, solid and hazardous waste management and disposal, and natural and cultural resources protection. Strict procedures to protect workers and the general public from ionizing and non-ionizing radiation are in place. These facilities have established environmental management programs in place that are subject to routine environmental compliance audits from both internal and external auditors to ensure requirements governing air emissions, wastewater and storm water management, hazardous materials and waste management, and cultural and natural resources management, etc. are met. Additionally, where appropriate, MDA conducts routine compliance assessments, health and safety, and quality control audits at these facilities. Because of these controls, these types of activities have little potential for significant environmental impacts.

The Team specifically limited this CATEX to actions conducted at existing facilities, actions consistent with previously established safety levels and in compliance with Federal, state, and local requirements to protect the environment, and actions conducted in a manner resulting in no, or *de minimis* change in the use of the facility. This was done to ensure no potential for significant environmental impacts. Further, this CATEX expressly does not include actions that would substantially increase the extent of potential environmental impacts or is controversial.

As documented in Table B-20.1 and B-20.2, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;
- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;

- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;
- 4) Extraordinary circumstances associated with its application are absent; and
- 5) No known significant impacts are associated with this proposed activity.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

## **Comparable Agency Categorical Exclusion and Administrative Record**

### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(h) (5) Research, testing, and operations conducted at existing enclosed facilities consistent with previously established safety levels and in compliance with applicable federal, state, and local standards. For facilities without existing NEPA analysis, including contractor-operated facilities, if the operation will substantially increase the extent of potential environmental impacts or is controversial, an EA (and possibly an EIS) is required.

### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(17) New activities conducted at established laboratories and plants (including contractor-operated laboratories and plants) where all airborne emissions, waterborne effluent, external ionizing and non-ionizing radiation levels, outdoor noise, and solid and bulk waste disposal practices are in compliance with existing applicable Federal, state, and local laws and regulations.

### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.27. Normal or routine basic and applied scientific research confined to the laboratory and in compliance with all applicable safety, environmental, and natural resource conservation laws.

### **U.S. Coast Guard**

**Reference:** *COMMANDANT INSTRUCTION M16475.1D, Categorical Exclusions*

(28) Contracts for activities conducted at established laboratories and facilities, to include contractor-operated laboratories and facilities, on USCG-owned property where all airborne emissions, waterborne effluents, external radiation levels, outdoor noise, and solid and bulk waste disposal practices are in compliance with existing applicable Federal, state, and local laws and regulations. (Checklist required.)

### **Anima Plant Health Inspection Service**

**Reference:** *7 CFR 372.5 (c)*

(2) Research and development activities. (i) Activities that are carried out in laboratories, facilities or other areas designed to eliminate the potential for harmful environmental effects--internal or external--and to provide for lawful waste disposal (ii) Examples of this category of actions include: (A) The development and/or production (including formulation, repackaging, movement, and distribution) of previously approved and/or licensed program materials, devices, reagents, and biologics; (B) Research, testing, and development of animal repellents; and (C) Development and production of sterile insects.

### **Environmental Protection Agency**

**Reference:** *40 CFR 6 Subpart G Sec. 6.704 Categorical Exclusions*

(b) The following specialized categories of ORD actions are eligible for categorical exclusion from a detailed NEPA review: (4) Projects conducted completely within a contained facility, such as a laboratory or other enclosed building, where methods are employed for appropriate disposal of laboratory wastes and safeguards exist against hazardous, toxic, and radioactive materials entering the environment. Laboratory directors or other appropriate officials must certify and provide documentation that the laboratory follows good laboratory practices and adheres to applicable Federal statutes, regulations and guidelines.

### **Missile Defense Agency Environmental Reviews**

**Reference:** *Final Programmatic Environmental Assessment (PEA) of Propulsion Testing Capabilities at the Phillips Laboratory, Edwards Air Force Base, California, January 1998, resulting in a FONSI*

This PEA analyzed the proposed increase in propellant testing operations in Phillips Laboratory at Edwards AFB, California; conduct rocket propulsion basic exploratory and developmental research; execute the research, and exploratory development and advanced development programs for interdisciplinary space technology and rocket programs; provide support and capability for other governmental agencies and private industries to conduct contracted and in-house research and development; and ensure compliance with applicable environmental laws and regulation.

Thirteen broad resource areas were considered and it was determined no significant environmental impacts associated with implementation of the proposed action Alternative. No adverse environmental impacts resulting from MDA activities have been observed at Phillips Laboratory.

**Reference:** *Vertical Gun Test Environmental Assessment, May 2004, resulting in a FONSI*

This EA analyzed the proposal to conduct up to six vertical gun tests within a two-week period at the Energetic Materials Research and Testing Center at New Mexico Institute of Mining and Technology, located near Socorro, NM. Canisters containing tributyl

phosphate (TBP) would be launched at the 3K North site. The canisters would contain approximately 110 pounds of TBP thickened using polybutyl methacrylate enhanced with blue dye for observation purposes. A small amount of explosives would be used to rupture the canister tanks during ascent at an altitude of approximately 1,640 feet, resulting in the creation of a short-lived aerosol debris cloud and the subsequent dispersion of TBP droplets.

A suite of remote sensing instruments operated by the USAF Research Laboratory would be employed to monitor firing of the vertical gun, the TBP aerosol debris cloud that would form upon rupture of the launched canister, and the resulting TBP droplet debris fallout, including droplet formation, size, and spatial distribution.

Thirteen resource areas were considered in the EA and MDA determined that no significant impacts would result from the proposed action. No adverse environmental impacts have occurred from MDA activities at the test site.

**Reference:** *Missile Defense Agency MUDPACK II Test Environmental Assessment, April 2005, resulting in a FONSI*

This EA analyzed activities at the High Energy Laser System Test Facility (HELSTF), located at WSMR in New Mexico.

The purpose of the proposed tests was to characterize and quantify 1) the effects of a laser directed at the rocket motor of a ballistic missile during its boost phase, and 2) the resulting effect on the payload (i.e., bomblets or an inert mass). The analysis would include observing the effect of firing the laser at the rocket motor and documenting the debris characteristics and dispersion pattern.

The proposed action was to perform a series of tests that involved lasing a restrained thrusting solid rocket motor containing either a payload of inert bomblets filled with *Bacillus thuringiensis* powder (a commonly used organic insecticide), or an inert mass.

Thirteen resource areas were considered and the resulting environmental analysis showed that no significant short-term or long-term effects to the environment or surrounding populations would occur from the proposed tests. No adverse environmental impacts from MDA test activities have occurred at the HELSTF.

**Reference:** *Construction of a High Altitude Simulation Chamber and Conduct of MDA Lethality Tests at Porton Down, UK, EO 12114 Environmental Review, October 2002*

While not a NEPA document, this Environmental Review (ER) is referenced to demonstrate no environmental impacts were anticipated as a result of this type of activity.

This ER analyzed the construction of a steel linear chamber/tube approximately 425 ft long with vacuum pumps and supporting infrastructure to simulate a high altitude

environment for testing the dispersal of chemical agents released from high altitude (up to 100 km) ballistic missile intercepts. This vacuum chamber would serve as an experimental laboratory to conduct approximately 100 dispersion tests over four years.

Live agents would be produced at Porton Down and transported, securely stored (and guarded by Ministry of Defense, United Kingdom (MODUK forces)), and tested within the compound. Chemical wastes from decontamination and contaminated materials would be incinerated onsite at Porton Down using the UK's Safe Working Practices standards. All live agents would be produced, used in tests and disposed of, within the confines of Porton Down. Therefore, there would be no significant increased impacts to the environment or public health in the UK. During testing and decontamination activities within the High Altitude Simulator Facility all personnel would wear the appropriate personal protective equipment; comply with MODUK laboratory, transportation, storage, and security protocols; and execute the UK Safe Working Practice standards. Application of the Safe Working Standards to the lethality test processes would further minimize environmental, safety, occupational and public health risks. Lastly, live agent testing at Porton Down would be viewed as a normal business activity that would be tightly controlled, directly supports combat operations of the UK and, would be authorized by the Parliament.

The MODUK prepared an environmental analysis of existing operations, and concluded its action has no significant effect on the environment. No adverse environmental impacts resulting from MDA activities at Porton Down have been observed.

**Reference: *REC Russian-American Observation Satellites (RAMOS), May 2003. Qualifies for Air Force CATEX A2.3.27 and Navy CATEX (17).***

The proposed action was to include design, fabrication, integration, test, launch, and operation of two satellites that would conduct a series of scientific experiments over a two-year mission life.

**Reference: *REC Laboratory Experimentation and Analysis in Support of Corporate Lethality Program, June 2003. Qualifies for Air Force CATEX A2.3.27.***

The proposed action and ongoing activities conducted at a federally funded research and development centers, DoD facilities, and academic institutions included the investigation of the intercept of various threat payloads at different altitudes and speeds. This included laboratory experimentation of developing equation of state data used in simulated engagement, predictive tools, scaled impact studies with high-speed gas guns, comparisons of actual threat agents to simulants, determining thermo-mechanical properties of agents and simulants, observing and analyzing hypervelocity impact flash for kill assessment, using vertical wind tunnels to characterize agent/simulant aerodynamic response and slide wire testing to characterize stimulant viscoelasticity.

**Reference: *REC Use of Tributyl Phosphate (TBP) in Bulk Chemical Aerobreakup Experiments at New Mexico Institute of Mining and Technology, October 2004. Qualifies for Air Force CATEX A2.3.27.***

The proposed action would employ a 500' x 8" powder gun to propel at supersonic speeds, 24" x 8" canisters containing approximately 18 kg of thickened TBP. The experiment entailed three methods of TBP dispersal, with a preliminary test matrix of fourteen shots.

**Reference: *REC Kinetic Energy Interceptor Program – Stage-1 Rocket Motor Manufacture and Static Fire Tests at Alliant Tech Launch Systems (ATK) Clearfield Facility, Utah, July 2006. Qualifies for Army CATEX (h)(5).***

ATK would manufacture and static fire test up to five KEI Stage-1 rocket motors at its existing contractor facilities in Utah.

**Reference: *REC Kinetic Energy Interceptor Program – Stage-2 Rocket Motor Manufacture and Static Fire Tests at the Alliant Techsystems, Inc. (ATK) Elkton Facility, Maryland, November, 2006. Qualifies for Army CATEX (h)(5).***

ATK would manufacture and static fire test up to four KEI Stage-2 rocket motors at its existing contractor facilities in Maryland.

**Reference: *REC Radiation Testing of Microsatellite Components, May 2007. Qualifies for Air Force CATEX A2.3.27.***

Proton testing of COTS microsatellite components used by MDA's DSE program would be conducted at the Indiana University Cyclotron Facility in Bloomington, Indiana to evaluate the performance of COTS components under a space radiation environment. During testing, each component will be irradiated with 200 MeV protons and monitored to identify the sensitivity of microsatellite components to radiation at levels that simulate the environment in space. A total of four tests were planned.

**Reference: *MFR Kinetic Energy Interceptor Motor Disposition, September 2010. Qualifies for Navy CATEX (f)(17).***

It was determined the proposed action was already covered by NEPA consideration in RECs for the Stage-1 Rocket Motor Manufacture and Static Fire Tests at ATK Clearfield Facility, Utah, July 2006 and the Stage-2 Rocket Motor Manufacture and Static Fire Tests at the ATK Elkton Facility, Maryland, November, 2006. The proposed action under this MFR was to static fire two Stage 1 motors and two Stage 2 motors at ATK Promontory, UT. The third Stage 1 motor would be transported to Eglin AFB, FL or Redstone Arsenal, AL and used to conduct insensitive munitions testing.

**Reference: *RCE Construction of a Deckhouse Support Building, Relocatable Deckhouse, Installation and Checkout of an Aegis Ashore Weapons System at Lockheed Martin Mission Systems and Sensors (MS2), Moorestown, New Jersey, May 2011. Qualifies for Navy CATEX (f)(17).***

The proposed action among other things is to test, check out and ensure the Aegis Ashore system is operationally ready. Testing of the AA system would be similar to existing testing protocols MS2 uses for Aegis Weapons Systems.

**Table B-20.1 Comparative Analysis of MDA CATEX B-20to Other Agency CATEXs.**

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Navy</b>	<b>U.S. Air Force</b>	<b>U.S. Coast Guard</b>	<b>Notes</b>
<b>Applicable CATEXs</b>	B-20	(h)(5)	(f)(17)	A2.3.27	(28)	
<b>Characteristics of the Action</b>	Research, testing, and operations conducted at existing facilities and plants or laboratories (including contractor-operated laboratories and plants) and in compliance with all applicable safety, environmental and natural conservation laws.	Proposed action is limited to research, testing, and operations conducted at existing enclosed facilities consistent with previously established safety levels and in compliance with applicable federal, state, and local standards. For facilities without existing NEPA analysis, including contractor-operated facilities, if the operation will substantially increase the extent of potential environmental impacts or is controversial, an EA (and possibly an EIS) is required.  MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, USAKA; WSMR, NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.	Proposed action is limited to new activities conducted at established laboratories and plants (including contractor-operated laboratories and plants) where all airborne emissions, waterborne effluent, external ionizing and non-ionizing radiation levels, outdoor noise, and solid and bulk waste disposal practices are in compliance with existing applicable Federal, state, and local laws and regulations.  MDA has extensive experience working at U.S. Navy installations such as PMRF, HI; Point Mugu Sea Range, CA; San Nicolas Island, CA; and Dahlgren Naval Base, VA.	Proposed action is limited to normal or routine basic and applied scientific research confined to the laboratory and in compliance with all applicable safety, environmental, and natural resource conservation laws.  MDA has extensive experience working at U.S. Air Force Installations such as Vandenberg AFB, CA; Edwards AFB, CA; Wake Island; Clear AFS, AK; Elmendorf AFB, AK; Eareckson AFS, AK; and Schriever AFB, CO.	Proposed action is limited to contracts for activities conducted at established laboratories and facilities, to include contractor-operated laboratories and facilities on USCG-owned property where all airborne emissions, waterborne effluents, external radiation levels, outdoor noise, and solid and bulk waste disposal practices are in compliance with existing applicable Federal, state, and local laws and regulations. (Checklist required.)	Examples of these types of activities include research, testing, and operation of sensors (radars) and their components, lasers, propellants, missile payloads, communication equipment, integrated missile defense systems, and simulated high altitude component and material testing.
<b>Methods of Implementing the Action</b>	Work with host installation or contractor owned lab to identify applicable laws, regulations, management plans and SOPs.  Work with host installation or contractor owned lab to obtain require permits and to record and report usage and disposal of any test items or materials.  Work with host installation or contractor owned lab to either review existing NEPA and/or prepare necessary NEPA documentation.  Work with host installation or contractor owned lab to conduct any required coordination with Federal and state agencies.	Installation staff to identify applicable laws, regulations, management plans and SOPs or assist contractor owned lab in same.  Installation staff to obtain require permits and to record and report usage and disposal of any test items or materials or assist contractor owned lab in same.  Installation staff to review existing NEPA and/or prepare necessary NEPA documentation or assist contractor owned lab in same.  Installation staff to conduct any required coordination with Federal and state agencies or assist contractor owned lab in same.	Same	Same	Similar	Because MDA owns no facilities of this type, these activities are conducted either at existing military facilities or at government defense contractor owned facilities. These facilities already have established and long-standing environmental programs in place governing air emissions, wastewater and storm water discharges, solid and hazardous waste storage and disposal, natural and cultural resource protection, as well as strict procedures to protect workers and the general public from ionizing and non-ionizing radiation.
<b>Frequency of the Actions</b>	These types of activities are conducted much less frequently at MDA than with the Military Services and Government contractors. This is because these facilities are already exclusively dedicated to these activities on a day-to-day, year round basis. MDA, as a visitor, conducts its activities at these facilities much less frequently.	Greater	Greater	Greater	Unknown	Typical laboratory operations subject to conditions of regulatory permits and management plans.
<b>Applicable Regulations</b>	NEPA, CERCLA, CWA, CAA and other applicable Federal and state regulations, DoD and Military Service requirements, and industry standards.	Same	Same	Same	Same	
<b>Applicable SOPs</b>	Plant or laboratory specific, but are consistent among similar test facilities.	Same	Same	Same	Same	

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Navy</b>	<b>U.S. Air Force</b>	<b>U.S. Coast Guard</b>	<b>Notes</b>
<b>Timing and Context</b>	Because MDA has no real property or test facilities, it must conduct these activities on host facilities. They can occur at any time.	Continuous over time at high levels relative to MDA.	Continuous over time at high levels relative to MDA.	Continuous over time at high levels relative to MDA.	Unknown	
<b>Extraordinary Circumstances</b>	None	Same	Same	Same	Same	
<b>Known Impacts from Proposed Action</b>	After 20+ years of testing, MDA knows of no known significant impacts from these types of activities.	Same	Same	Same	Same	

**Table B-20.2 Comparative Analysis of MDA Proposed CATEX B-20 to MDA Environmental Analyses.**

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>Final Programmatic Environmental Assessment of Propulsion Testing Capabilities at the Phillips Laboratory, Edwards Air Force Base, California, January 1998, FONSI Signed</b>	<b>Construction of a High Altitude Simulation Chamber and Conduct of MDA Lethality Tests at Porton Down, UK, EO 12114 Environmental Review, October 2002</b>	<b>Vertical Gun Test Environmental Assessment, May 2004, FONSI Signed</b>	<b>Missile Defense Agency MUDPACK II Test Environmental Assessment, April 2005, FONSI Signed</b>
<b>Applicable CATEXs</b>	B-20				
<b>Characteristics of the Action</b>	Research, testing, and operations conducted at existing facilities and plants or laboratories (including contractor-operated laboratories and plants) and in compliance with all applicable safety, environmental and natural conservation laws.	Phillips Laboratory at Edwards AFB, California proposes to increase propellant testing operations; conduct of rocket propulsion basic exploratory and developmental research; execute the research, and exploratory development and advanced development programs for interdisciplinary space technology and rocket programs; provide support and capability for other governmental agencies and private industries to conduct contracted and in-house research and development; and ensure compliance with applicable environmental laws and regulation.	The proposed action is construction of a steel linear chamber/tube approximately 425 ft long with vacuum pumps and supporting infrastructure to simulate a high altitude environment for testing the dispersal of chemical agents released from high altitude (up to 100 km) ballistic missile intercepts. This vacuum chamber will serve as an experimental laboratory to conduct approximately 100 dispersion tests over four years.	MDA would conduct up to six vertical gun tests within a two-week period at the NMT 3K North site. Canisters containing TBP would be launched at the 3K North site. The canisters would contain approximately 110 pounds of TBP thickened using polybutyl methacrylate enhanced with blue dye for observation purposes. A small amount of explosives would be used to rupture the canister tanks during ascent at an altitude of approximately 1,640 feet, resulting in the creation of a short-lived aerosol debris cloud and the subsequent dispersion of TBP droplets.	MDA would complete rest activities at the HELST), located at the WSMR in New Mexico.
<b>Methods of Implementing the Action</b>	<p>Work with host installation or contractor owned lab to identify applicable laws, regulations, management plans and SOPs.</p> <p>Work with host installation or contractor owned lab to obtain require permits and to record and report usage and disposal of any test items or materials.</p> <p>Work with host installation or contractor owned lab to either review existing NEPA and/or prepare necessary NEPA documentation.</p> <p>Work with host installation or contractor owned lab to conduct any required coordination with Federal and state agencies.</p>	Same	Same	Same	Same
<b>Frequency of the Actions</b>	These types of activities are conducted much less frequently at MDA than with the Military Services and Government contractors. This is because these facilities are already exclusively dedicated to these activities on a day-to-day, year round basis. MDA, as a visitor, conducts its activities at these facilities much less frequently.	An incremental increase in existing testing which is already frequent and continuous over time.	100 dispersion tests over 4 years.	Multiple tests during summer months within a two-week period. Incremental increase in existing tests that occur frequently over time.	A series of tests over a short period of time.
<b>Applicable Regulations</b>	NEPA, CERCLA, CWA, CAA and other applicable Federal and state regulations, DoD and Service requirements, and industry standards.	Same	Follow Host Nation requirements	Same	Same
<b>Applicable SOPs</b>	Plant or laboratory specific, but are consistent among similar test facilities.	Same	Same	Same	Same
<b>Timing and Context</b>	Because MDA has no real property or test facilities, it must conduct these activities on host facilities. They can occur at any time.	Same	Same	Same	Same
<b>Extraordinary Circumstances</b>	None	Same	Same	Same	Same
<b>Known Impacts from Proposed Action</b>	After 20+ years of testing, MDA knows of no known significant impacts from these types of operations.	No adverse environmental impacts have been observed at from MDA tests.	No adverse environmental impacts were observed at the site from MDA tests.	No adverse environmental impacts were observed at the site from MDA tests.	No adverse environmental impacts have occurred at HELSTF from MDA tests.

**B-21. Routine installation and use of radars, telemetry systems, communications equipment, and other essentially similar facilities and equipment within a launch facility, mobile platform, military installation, training area, or previously disturbed area that conform to current American National Standards Institute/Institute of Electrical and Electronics Engineers (ANSI/IEEE) guidelines for maximum permissible exposure to electromagnetic fields. (REC required).**

Routine installation and use of radars, telemetry systems, communications equipment, and other essentially similar facilities and equipment contemplated by this CATEX are limited to those being installed at a launch facility, mobile platform, military installation, training area, or previously disturbed areas and conforms to current ANSI/IEEE guidelines for maximum permissible exposure to electromagnetic fields. By confining placement of facilities and equipment to previously disturbed areas and existing developed operational areas, we are minimizing the potential impact to sensitive environments, biological and cultural resources (i.e., less likely impact cultural or biological resource if the area was either on paved or otherwise developed land or already disturbed (cleared and excavated at some point in the past)). Protected biological and cultural resources at these facilities and installations have already been identified by installation personnel. ANSI/IEE guidelines ensure there are no impacts to the environment or humans from exposure to electromagnetic fields. Also, temporary exposure of birds flying through the radar beam has been extensively studied in MDA EAs and EISs and has been found not to be significant.

The installation and use of radars, telemetry systems, communications equipment, and other essentially similar facilities and equipment contemplated by this CATEX would typically rely on the infrastructure and surrounding environment where similar activities are already being conducted by the Services and other agencies (e.g., the use of range radars, telemetry collection devices, communication equipments, re-radiation towers, etc.). There would not be an increase in frequency of this activity due to use of this CATEX as MDA has been conducting these activities on host installation/ranges for several years complying with the NEPA regulations of the respective Service. No difference exists in the operation of MDA facilities and those of the Services in terms of time or day of use, frequency, or physical and biological effects of radar emissions. MDA would follow the same regulations, directives, protocols and procedures as the Services.

The routine installation and use of radars, telemetry systems, communications equipment, and other similar facilities and equipment typically involves minor site preparation (especially if an existing radar hardstand is unavailable for use), transport, set up, calibration, and operation. Typical site improvements might include one or more of the following activities:

- Site clearing and grubbing (<5 acres, previously disturbed area);
- Minor trenching and connection to existing power sources;
- Grading, filling, and compaction of hardstand area (<1 acre, previously disturbed area);
- Installation of satellite dishes for communications;
- Installation of temporary lighting;
- Installation of grounding and lightning protection poles;

- Installation of temporary fencing;
- Installation of noise attenuation barriers (if needed);
- Trimming and/or topping of trees in front of radar face;
- Construction of a gravel parking lot for up to 15 vehicles; and
- Construction of a gravel access road.

The radar, telemetry systems, communications equipment, and other similar facilities and equipment would be located and operated to minimize disruption to the on-going activities at the existing site. Electric power would be provided to the site by the installation or local utility in accordance with state approved procedures and Federal/state requirements. Additional lines and poles may be required to be installed within existing right-of-ways and previously disturbed areas. Alternatively, power could be provided by diesel generators, along with small backup generators for emergency use, and all would be periodically operated according to maintenance schedules and any permit restrictions. Safety from electromagnetic radiation would be assured by requiring compliance with current ANSI/IEEE guidelines for maximum permissible exposure to electromagnetic fields using keep out areas and fencing.

These activities would be conducted following existing installation SOPs, as well as all applicable Federal, state and DoD regulations designed to protect the quality of the human environment.

As long as the activities contemplated by this CATEX are conducted at a launch facility, mobile platform, military installation, training area, or previously disturbed area in conformance with current ANSI/IEEE guidelines for maximum permissible exposure to electromagnetic fields; follow existing installation SOPs; and comply with Federal, state, local and tribal environmental requirements; they would not have the potential to create significant environmental impacts. It is important to note that MDA has been conducting such activities at host installations/ranges under the applicable host Service NEPA Regulations and CATEXs for over 20 years. Through MDA's experience as well as experience by the Services, no adverse environmental or human health impacts have been observed from these activities.

The Team reviewed other agencies' CATEXs, particularly the Military Services where MDA typically conducts mission activities on their ranges/installations. The Team determined the above-enumerated CATEX encompassed activities routinely conducted in restricted areas at a launch facility, mobile platform, military installation, training area or previously disturbed areas because these activities:

- 1) Are the same type of activities conducted by our host installations and ranges at the same locations;
- 2) Must meet current ANSI/IEEE guidelines for maximum permissible exposure to electromagnetic fields;
- 3) Follow existing installation standard operating procedures; and
- 4) Must meet Federal, state, local and tribal environmental requirements.

The activities contemplated by this CATEX do not have an individual or cumulative significant impact on the environment. This CATEX is supported by environmental reviews and administrative records from MDA projects.

MDA also reviewed the impact analyses and conclusions in previously prepared programmatic and site-specific NEPA documentation, specifically for the routine installation and use of radars, telemetry systems, communications equipment, and other essentially similar facilities and equipment. These activities have been analyzed in a number of previously prepared documents, including the *Pacific Missile Range Facility Intercept Test Support Environmental Assessment/Overseas Environmental Assessment* (Navy 2010); *Missile Defense Agency Ballistic Missile Defense System (BMDS) Programmatic Environmental Impact Statement* (MDA 2007); *Ballistic Missile Defense Programmatic Environmental Impact Statement* (BMDO, 1994); *Ground-Based Midcourse Defense Initial Defense Operations Capability at Vandenberg Air Force Base Environmental Assessment* (MDA, 2003); *Ground-Based Midcourse Defense Extended Test Range Environmental Impact Statement* (U.S. Army Space and Missile Defense Command, 2003); *Ground-Based Midcourse Defense (GMD) Validation of Operations Concept (VOC) Supplemental Environmental Assessment* (MDA 2002); *Validation of Operations Concept (VOC) Environmental Assessment* (MDA 2002); *National Missile Defense Deployment Environmental Impact Statement* (U.S. Army Space and Missile Defense Command, 2000); *Theater Missile Defense Extended Test Range Supplemental Environmental Impact Statement* (U.S. Army Space and Strategic Defense Command, 1998a); *Theater Missile Defense Extended Test Range Environmental Impact Statement* (U.S. Army Space and Strategic Defense Command, 1994a); *Evolved Expendable Launch Vehicle Program Environmental Impact Statement* (U.S. Department of the Air Force, 1998); *Point Mugu Environmental Impact Statement/Overseas Environmental Impact Statement* (U.S. Department of the Navy, 2002b); and *Pacific Missile Range Facility Enhanced Capability Environmental Impact Statement* (U.S. Department of the Navy, 1998), and *Mobile Sensors Environmental Assessment* (MDA, 2005). A sample of these reviews is summarized in the next section.

These previous analyses, along with more than 20 years of Agency experience, show that potential impacts from routine installation and use of radars, telemetry systems, communications equipment, and other essentially similar facilities and equipment, including construction-related impacts would be short-term and insignificant. Activities that would continue at a launch facility, mobile platform, military installation, training area or previously disturbed area would not result in any significant impacts.

All activities would meet current ANSI/IEEE guidelines for maximum permissible exposure to electromagnetic fields and follow applicable regulations and established guidelines and management practices. Previous analyses show the impacts of such activities in support of MDA's BMDS would not be significant because such activities would be performed in accordance with existing regulations.

To ensure only those actions having negligible impacts on the human environment are contemplated by this CATEX, the Team proposed a REC be prepared to document the determination whether the action is either appropriately categorically excluded or whether it requires further analysis with an EA or EIS.

The limiting provisions were established to both conform to the evidence presented in the administrative record to clarify meaning of those limiting provisions found in the administrative record, or to add to or modify limitations found in the record based on MDA experience to further avoid the potential for significant impacts to the human environment.

As documented in Table B-21.1 and B-21.2, the Team conducted a comparative analysis (or benchmarking) of MDA's proposed CATEX to other applicable government organizations' CATEXs. We compared the characteristics of the action, methods of implementing the action, frequency of the action, applicable regulations, applicable SOPs, timing and context, extraordinary circumstances, and known impacts from the proposed action. The Team determined that:

- 1) An extensive history of the application of similar CATEXs by the Services and other Federal agencies exists;
- 2) MDA, as a DoD component, conducts these types of activities in a similar manner and frequency as the Services and other Federal agencies;
- 3) MDA, the Services, and other Federal agencies, with very few exceptions, must meet the same requirements to protect the environment and employ similar standard operating procedures to ensure compliance;
- 4) Extraordinary circumstances associated with its application are absent and documented by a REC; and
- 5) No known significant impacts are associated with this proposed activity, beyond those resulting from accidental fuel spills during fueling activities, which are unplanned actions. Potential impacts are mitigated using spill containment equipment and SOPs.

Therefore, the Team determined this CATEX is applicable to MDA projects and that the Services' and other Federal agencies' actions were similar in nature, scope, and impact on the human environment as those performed by MDA.

### **Comparable Agency Categorical Exclusion and Administrative Record**

#### **U.S. Army**

**Reference:** *32 CFR Part 651, Appendix B, Categorical Exclusions*

(e)(2) Acquisition, installation, and operation of utility and communication systems, mobile antennas, data processing cable and similar electronic equipment that use existing right-of-way, easement, distribution systems, and/or facilities (REC required).

#### **U.S. Navy**

**Reference:** *OPNAVINST 5090.1C Categorical Exclusions*

(f) (36) Acquisition, installation, and operation of utility (e.g., water, sewer, electrical) and communication systems (e.g., data processing cable and similar electronic equipment) which use existing rights of way, easements, distribution systems, and/or facilities.

(f)(44) Routine testing and evaluation of military equipment on a military reservation or an established range, restricted area, or operating area; similar in type, intensity and setting, including physical location and time of year, to other actions for which it has been determined, through NEPA analysis where the Department of Navy (DON) was a lead or cooperating agency, that there were no significant impacts; and conducted in accordance with all applicable standard operating procedures protective of the environment.

### **U.S. Air Force**

**Reference:** *32 CFR Part 989, Appendix B, Categorical Exclusions*

A2.3.12. Installing, operating, modifying, and routinely repairing and replacing utility and communications systems, data processing cable, and similar electronic equipment that use existing rights of way, easements, distribution systems, or facilities.

A2.3.13. Installing or modifying airfield operational equipment (such as runway visual range equipment, visual glide path systems, and remote transmitter or receiver facilities) on airfield property and usually accessible only to maintenance personnel.

A2.3.14. Installing on previously developed land, equipment that does not substantially alter land use (i.e., land use of more than one acre). This includes outgrants to private lessees for similar construction. The EPF must document application of this CATEX on AF Form 813.

### **Missile Defense Agency Environmental Reviews**

**Reference:** *Theater High Altitude Area Defense (THAAD) Pacific Test Flights Environmental Assessment, December 2002, resulting in a FONSI*

This EA analyzed the proposed use of an upgraded version of the THAAD Prototype Radar. There would be a maximum of two radars on location during flight testing. Only one radar would be operated at any given time. The other radar would be stored in an existing area of the installation and would be available for use should problems be encountered with the primary radar. An electromagnetic radiation hazard exclusion area would be established in front and to the side of the THAAD radar antenna. The electromagnetic radiation hazard exclusion area for personnel would extend for 1,312 feet in front and to the side of the radar.

Thirteen broad areas of environmental consideration were considered for assessing potential impacts. MDA determined no significant impacts would occur as a result of the construction and operation of any of the THAAD test sites and related support facilities. Over the course of six years, MDA has conducted over six THAAD tests at PMRF with no environmental impacts observed from the siting and operation of THAAD radars during tests by MDA.

**Reference: *Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Environmental Impact Statement, July 2003***

The proposed action, among other things, was to site, install/construct and operate various radars, telemetry systems, communications equipment, and other essentially similar facilities and equipment at additional launch and test facilities at various locations, including the SBX in the Pacific Region, to support more realistic interceptor flight tests. Most tests would include the launch of a target missile; tracking by range and other land-based, sea-based, airborne, and space-based sensors; launch of an interceptor missile; target intercept; and debris impacting into broad open areas of the Pacific Ocean. Each alternative would include common GMD test components consisting of GBIs, target missiles, an IDT, the SBX, and other sensors and instrumentation.

No significant environmental impacts or cumulative impacts on resource areas addressed for any activity considered in implementing the proposed action were found in this analysis. As appropriate, mitigation measures would be developed to address any site-specific significant impacts. MDA has conducted at least four tests per year at locations around the world using mobile radars, telemetry and communication equipment as part of the tests with no reported or observed environmental impacts.

**Reference: *Missile Defense Agency Mobile Launch Platform (MLP) Environmental Assessment, June 2004, resulting in a FONSI***

This EA analyzed, among other things, providing a mobile sea-based platform from which to more realistically test sensors (radars, telemetry, and optical systems) in support of MDA's mission. The MLP would also provide MDA the capability to use sensors at test support positions in remote areas of the ocean by locating these sensors on the MLP.

The MLP is the former USS Tripoli (LPH 10), a converted U.S. Navy Iwo Jima Class Amphibious Assault Ship (Helicopter). The sensors that would be tested from the MLP include radar, telemetry, and optical systems. Examples of radars to be used include: TPS-X, Mk-74, and Coherent Signal Processor radars that already exist, and the BMDS radar, being developed by the MDA. Telemetry systems could include the Transportable Telemetry System and mobile range safety systems. Mobile optical systems such as the Stabilized High-Accuracy Optical Tracking System could also be placed on the MLP. Additional sensor systems may be temporarily based on the MLP as required.

After analyzing the proposed action, no significant short-term or long-term effects to the environment or surrounding populations are expected. The MLP has been used on average two to five missions per year since 2005 with no adverse environmental impacts being reported or observed.

**Reference: *Mobile Sensors Environmental Assessment, September 2005, resulting in a FONSI***

MDA proposes to use land-based mobile sensors (i.e., radar, telemetry and communication, command and control, and optical systems) and airborne sensor systems (i.e., optical and infrared systems). A test event may use any combination of mobile land-based and one of the airborne mobile sensors. The land-based mobile sensors would be transportable systems that could operate as autonomous systems or as part of an integrated sensor system. Airborne systems also could operate as autonomous systems, but typically would be part of an integrated sensor system.

Land-based mobile sensors considered as part of the proposed action include Radar: TPS-X, FBX-T, MK-74 Target Tracking Illuminating System Radar, and MPS-36 Radar; Telemetry: TTS, MRSS, and; TRACS; Optical Systems: SHOTS and ISTEf.

There are three types of activities associated with using these land-based mobile sensors, pre-operational, operational, and post-operational activities. Pre-operational activities include transporting the sensor, site preparation activities, and checking out sensors; operational activities include activating the sensor; and post-operational activities include disassembling the sensor and transporting the sensor back to the storage or bed down location.

Land-based mobile sensors could be sited at the following locations: Vandenberg AFB, California; Naval Base Ventura County Port Hueneme/San Nicolas Island/Point Mugu, California; PMRF, Hawaii; Niihau, Hawaii; USAKA/Ronald Reagan Ballistic Missile Defense Test Site, Republic of the Marshall Islands; Midway Island; Wake Island; WSMR, New Mexico; Eareckson AFS, Alaska; King Salmon Air Station, Alaska; Kodiak Launch Complex, Alaska; Merle K. Smith Airport, Cordova, Alaska; Naval Air Station Whidbey Island, Washington; and National Aeronautics and Space Administration Wallops Island, Virginia.

The proposed airborne sensor systems include the HALO-I, HALO-II, and the WASP.

Activities associated with airborne sensor systems include flying airborne sensor systems to test support locations; setting up, checking out and performing maintenance on aircraft and airborne sensor systems at the staging and bed down locations; calibration of sensors; activation of sensors; flying airborne sensor systems from staging locations and test support locations back to bed down locations; ensuring safety of personnel operating the sensors; and waste disposal. Operations for airborne sensor systems would include activities at the bed down, staging, and test locations.

Bed down locations of airborne sensors could include: Jones Riverside Airport in Tulsa, Oklahoma; Majors Army Air Field in Greenville, Texas; Edwards AFB, California; and Kirtland AFB, New Mexico.

Staging Locations of airborne sensors could include: Adak, Alaska; Majuro Island, RMI; Anchorage International Airport, Alaska; McCarran International Airport, Nevada; Anderson AFB, Guam; McChord AFB, Washington; Andrews AFB, Maryland; Melbourne International Airport, Florida; Edwards AFB, California; Midway Island; Eglin AFB, Florida; Monterey Airport, California; Elmendorf AFB, Alaska; Nellis AFB, Nevada; MacDill AFB, Florida; Palm Beach International Airport, Florida; Majors Army Air Field, Texas; Palm Springs International Airport, California; Harlingen Airport, Texas; PMRF, Hawaii; Hickam AFB, Hawaii; Patrick AFB, Florida; Holloman AFB, New Mexico; Point Mugu, California; Huntsville International Airport, Alabama; Jones Riverside Airport, Oklahoma; Johnston Atoll; San Jose International Airport, California; Kodiak Airport, Alaska; Seattle Tacoma International Airport, Washington; Lihue International Airport, Hawaii; Travis AFB, California; Kaneohe Bay Marine Corp Air Station, Hawaii; Tulsa International Airport, Oklahoma; Keesler AFB, Mississippi; Tyndall AFB, Florida; Key West NAS, Florida; USAKA/RTS, RMI; Kirtland AFB, New Mexico; Wallops Island (NASA), Virginia; and Wake Island.

Test locations of airborne sensors could include: airspace over BOA airspace over land portions of ranges (WSMR, New Mexico or Holloman AFB, New Mexico); and airspace over ocean portion of ranges (Eastern Test Range, Patrick AFB, Florida; San Nicolas Island, California; PMRF, Hawaii; Western Range, Vandenberg AFB, California; or USAKA/RTS).

The proposed action, with electromagnetic radiation/electromagnetic interference surveys incorporated as part of the proposed action, would not have a significant adverse effect on the environment.

MDA has since conducted numerous test activities using numerous radars, telemetry and communication systems at many of the sites listed in the EA with no adverse environmental impacts being reported or observed.

**Reference:** *Missile Defense Agency Ground-Based Midcourse Defense (GMD) Sea-Based X-Band (SBX) Radar Placement and Operation Adak, Alaska, October 2005, resulting in a FONSI*

This EA analyzed among other things, operation of the SBX Radar while at the Primary Support Base (PSB) and the use of onshore PSB assets and infrastructure to support SBX operations.

Thirteen areas of environmental consideration were evaluated and based on analysis of the proposed placement and operation the SBX at the PSB but would not be limited to Adak Island, Alaska; no significant impacts affecting the quality of the human environment were identified. Due to program changes, the SBX continues to operate for tests, but has been relocated to another site.

**Reference: *Missile Defense Agency Ballistic Missile Defense System (BMDS) Programmatic Environmental Impact Statement, January 2007***

This PEIS analyzed among other things the development or enhancement of BMDS sensors to acquire, record, and process data on threat missiles and interceptor missiles; detect and track threat missiles; direct interceptor missiles or other defenses (e.g., lasers); and assess whether a threat missile has been destroyed.

The operating environments of the existing and proposed BMDS sensors can be considered in four general categories. Land-based sensors may be fixed, located in or on a building, or mobile, located on a vehicle or trailer. Air-based sensors are located on platforms that can travel through the air such as airplanes, balloons, and airships. Sea-based sensors are located on platforms that travel on water (e.g., ships or a floating platform) or are fixed in water (e.g., a man-made island or platform like an oil platform that is fixed to the seafloor). Space-based sensors are located on satellites, which travel in circular or elliptical orbits around the Earth.

The affected environment includes all land, air, water, and atmospheric environments where proposed activities are reasonably foreseeable. For this PEIS, the affected environment includes all locations, ranges, installations, and facilities that MDA has used, uses, or proposes to use for the BMDS both within and outside the U.S.

No significant environmental impacts or cumulative impacts on resource areas addressed for any activity considered in implementing the BMDS were found in this programmatic impact analysis. MDA also analyzed the potential impacts of electromagnetic radiation on wildlife and determined that there would be no significant impact. Although, there could be impacts associated with the specific BMDS program activities at specific locations; they would be addressed, as appropriate, in subsequent NEPA analyses that would tier from the PEIS. As appropriate, mitigation measures would be developed to address any site-specific significant impacts. MDA has conducted at least four tests every year at locations around the world using mobile radars, telemetry and communication equipment as part of the tests with no reported or observed environmental impacts.

**Reference: *Missile Defense Agency Relocatable In-Flight Interceptor Communications System Data Terminal #2 at Vandenberg Air Force Base, Supplemental Environmental Assessment, November 2007, resulting in a FONSI***

This SEA analyzed in part the siting, construction and operation of a second RIDT, at a site adjacent to the existing RIDT along El Rancho Road on Vandenberg AFB.

An IDT is a Super High Frequency radio transmitter and receiver that provide communications between the GFC Components and the GBI. Calibration may occur approximately twice per year. An RIDT is made up by the integration of the compound, facilities, antenna, communications node equipment, long haul communications, and embedded test and training capability. Long haul communications are communications

lines which connect the RIDT site to the larger (off-base) GMD communications network. Embedded test capability refers to the equipment installed at the RIDT facility, which allows GMD to run tests and simulations, and gather flight test data for analysis. The Vandenberg AFB IDTs are designed to be relocatable, to provide the flexibility to remove, replace, and relocate the terminal quickly should the need arise.

Based on analysis of the proposed construction and operation of a second RIDT at Vandenberg AFB, this SEA identified no significant impacts affecting the quality of the human environment. No environmental impacts have been reported or observed since the construction and operation of the IDT#2 at VAFB.

**Reference: *AF 813 TPS-X Radar Deployment/Use, September, 2002. Qualifies for Air Force CATEX A2.3.14.***

The proposed action included the deployment and use of the TPS-X Radar on a temporary basis on previously disturbed land. No major construction would be required, but the proposed action would include installation of a perimeter fence, installation of support utilities and operation of portable generators if commercial power were not available.

**Reference: *AF 813 Temporary Use of Transportable Telemetry Equipment at Eareckson AFS in support of Flight Test 04-5, August 2005. Qualifies for Air Force CATEX A.2.3.12 and A2.3.14.***

The proposed action was to temporarily install a communications system on previously disturbed land with no permanent alteration of the site. Installation would include two transportable telemetry dishes and van; one telemetry van and one storage van; two SATCOM trailers with antennae; two 60 kW diesel electric generators with double-walled fuel tanks; and two connex trailers to support FT-4-5 mission.

**Reference: *REC AN/TPY-2 Radar Deployment at the Ted Stevens Marine Research Institute (TSMRI) on the National Oceanic and Atmospheric Administration (NOAA) Site in Juneau, Alaska in Support of Flight Test Ground-Based Interceptor (FTG) -04, May 2007. Qualifies for Army CATEX (E)(2).***

The proposed action was to site, transport, set up, calibrate, and operate the AN/TPY-2 radar at TSMRI. The AN/TPY-2 radar and system components typically require approximately 3 acres of graded compacted hardstand surface and approximately 12 acres of clear zone to allow unobstructed, low-elevation radiation.

**Reference: *AF 813 Ballistic Missile Defense System Communications Support Complex – Transportable (BCSC-T), February 2008. Qualifies for CATEX AF A2.3.14.***

The proposed action was to temporarily site a transportable communications package consisting of three distinct transportable components (a protected communication control system, satellite communication, and power) on previously disturbed land.

**Reference:** *AF 813 MDA/GMD Extended Test Range- VAFB LF-24 Mods for Test, August 2008. Qualifies for Air Force CATEX A2.3.14.*

The proposed action among other things included the installation of a re-rad tower.

**Reference:** *AF 813 MDA Transportable Telemetry System (TTS) #3 at Kaena Point Satellite Tracking Station (KPTS), August 2009. Qualifies for Air Force CATEX A2.3.12.*

The proposed action was to site the TTS#3 on an existing concrete pad adjacent to the HULA B antenna. No new generators and no new fuel storage facilities would be required.

**Reference:** *AF 813 AN/TPY-2 Radar Deployment at Wake Island in support of MDA Ballistic Missile Defense Systems (BMDS) Flight Tests, November 2009. Qualifies for Air Force CATEX A2.3.14.*

The proposed action was to site, set up, calibrate and operate the AN/TPY-2 Radar, Defense Satellite Communication System, Transportable Telemetry System and supporting communications equipment on previously disturbed land on Wake Island. Minor site clearing and preparation would occur and all cabling would either use existing buried conduit or be laid on the ground in protected cable trays.

**Reference:** *AF 813 Beddown of Missile Defense Agency (MDA) Mobile Telemetry System at Kaena Point Satellite Tracking Station, December, 2010. Qualifies for Air Force CATEX A2.3.12.*

The proposed action was to site, transport, set up, calibrate and operate a Mobile Telemetry System at Kaena Point Satellite Tracking Station. The MTS requires a minimum of 35 x 35 foot space and connection to site power. Existing UPS and backup generators would be used.

**Reference:** *AF 813 Air-borne Infrared Ground-based Operations at Site 460, VAFB, June 2011. Qualifies for Air Force CATEX A2.3.12.*

MDA would set up and test an ABIR Data Collection system at VAFB Site 460. The system consists of: 1) Multispectral Targeting System-B ground-mounted sensor, 2) an airborne-capable computer processor enclosed in a secure shelter, and 3) an Operations Control Van to support personnel monitoring the data and equipment.

**Table B-21.1 Comparative Analysis of MDA CATEX B-21 to Other Agency CATEXs.**

Benchmarking Categories	MDA	U.S. Army	U.S. Navy	U.S. Air Force	Notes
<b>Applicable CATEXs</b>	B-21	(c)(1) and (e)(2)	(f)(36) and (44)	A2.3.12, A2.3.13, and A2.3.14	
<b>Characteristics of the Action</b>	<p>Routine installation and use of radars, telemetry systems, communications equipment, and other essentially similar facilities and equipment within a launch facility, mobile platform, military installation, training area, or previously disturbed area that conform to current ANSI/IEEE guidelines for maximum permissible exposure to electromagnetic fields. (REC required).</p> <p>Limited site preparations (e.g., grading, gravel road construction, filling, trenching, etc.) if any, are conducted; spill containment barriers are used to contain fuel spills and coolant leaks. Temporary fencing, lightning protection systems, and lighting would be installed per local requirements to minimize “shine.”</p> <p>Cables can either lie on ground or be in conduit; if site conditions and time permits, cabling can be placed in shallow trenches dug in previously disturbed areas and utility easements.</p> <p>Diesel fuel provided by installation and conforms to air permit and local requirements (e.g., ultra low sulfur fuel).</p> <p>Installation and operation of equipment is confined to host installation (or in extremely limited instances, private property where similar actions are permitted).</p>	<p>Proposed is limited to acquisition, installation, and operation of utility and communication systems, mobile antennas, data processing cable and similar electronic equipment that use existing right-of-way, easement, distribution systems, and/or facilities (REC required).</p> <p>MDA has extensive experience working at U.S. Army installations such as the Ronald Reagan Test Site, USAKA; WSMR, NM; Redstone Arsenal, AL; Fort Greely, AK; Fort Drum, NY; and Fort Belvoir, VA.</p>	<p>Proposed is limited to f) (36) Acquisition, installation, and operation of utility (e.g., water, sewer, electrical) and communication systems (e.g., data processing cable and similar electronic equipment) which use existing rights of way, easements, distribution systems, and/or facilities.</p> <p>(f) (44) Routine testing and evaluation of military equipment on a military reservation or an established range, restricted area, or operating area; similar in type, intensity and setting, including physical location and time of year, to other actions for which it has been determined, through NEPA analysis where the DON was a lead or cooperating agency, that there are no significant impacts; and conducted in accordance with all applicable standard operating procedures protective of the environment;</p> <p>MDA has extensive experience working at U.S. Navy installations such as PMRF, HI; Point Mugu Sea Range, CA; San Nicolas Island, CA; and Dahlgren Naval Base, VA.</p>	<p>Proposed action is limited to A2.3.12. Installing, operating, modifying, and routinely repairing and replacing utility and communications systems, data processing cable, and similar electronic equipment that use existing rights of way, easements, distribution systems, or facilities.</p> <p>A2.3.13. Installing or modifying airfield operational equipment (such as runway visual range equipment, visual glide path systems, and remote transmitter or receiver facilities) on airfield property and usually accessible only to maintenance personnel.</p> <p>A2.3.14. Installing on previously developed land, equipment that does not substantially alter land use (i.e., land use of more than one acre). This includes outgrants to private lessees for similar construction. The EPF must document application of this CATEX on AF Form 813.</p> <p>MDA has extensive experience working at U.S. Air Force Installations such as Vandenberg AFB, CA; Edwards AFB, CA; Wake Island; Clear AFS, AK; Elmendorf AFB, AK; Eareckson AFS, AK; and Schriever AFB, CO.</p>	<p>The radar, telemetry systems, communications equipment, and other similar facilities and equipment would be located and operated to minimize disruption to the on-going activities at the existing site. Electric power would be provided to the site by the installation or local utility in accordance with state approved procedures and Federal/state requirements (may require additional lines and poles to be installed within existing right-of-ways or previously disturbed areas).</p> <p>Alternatively, power could be provided by diesel generators, along with small backup generators for emergency use and all would be periodically operated according to maintenance schedules.</p> <p>Safety from electromagnetic radiation would be assured by requiring compliance with current ANSI/IEEE guidelines for maximum permissible exposure to electromagnetic fields using keep out areas and fencing.</p>
<b>Methods of Implementing the Action</b>	<p>Obtain test plan and CONOPs from MDA test proponent.</p> <p>Work with host installation or property owner to find suitable location and permission to install and operate equipment.</p> <p>Work with host installation to identify applicable laws, regulations, and SOPs.</p> <p>Work with host installation to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation or property owner to conduct any required site preparation activities.</p> <p>Deploy equipment to site, install, test, and operate equipment per Test CONOPs.</p> <p>Retrograde equipment and restore site to original condition (or agreed upon condition – e.g., leaving behind grounding grids or sound barriers).</p>	<p>Obtain test plan and CONOPs from Army test proponent.</p> <p>Installation staff to find suitable location and permission to install and operate equipment.</p> <p>Installation staff to identify applicable laws, regulations, and SOPs.</p> <p>Installation staff to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Installation staff to conduct any required site preparation activities.</p> <p>Deploy equipment to site, install, test, and operate equipment per Test CONOPs.</p> <p>Retrograde equipment and restore site to original condition (or agreed upon condition – e.g., leaving behind grounding grids or sound barriers).</p>	Same	Same	

<b>Benchmarking Categories</b>	<b>MDA</b>	<b>U.S. Army</b>	<b>U.S. Navy</b>	<b>U.S. Air Force</b>	<b>Notes</b>
<b>Frequency of the Actions</b>	Generally one time. However, at larger installations, MDA could conduct up to two tests/year at any given location.	Same	Same	Same	Typical range operations are subject to conditions of installation's regulatory permits, cultural and natural resources management plans, and environmental restoration program.
<b>Applicable Regulations</b>	NEPA, ESA, NHPA, ARPA, CERCLA, CWA, CAA, and other applicable Federal and state regulations, DoD and Service requirements, and industry standards.	Same	Same	Same	
<b>Applicable SOPs</b>	Installation/Manufacturer specific SOPs and BMPs	Same	Same	Same	
<b>Timing and Context</b>	<p>Radars and support equipment are used to support BMDS test events that could occur any time of the year. Equipment, many times, is tactical or operational equipment and is in short supply; therefore, it is moved to other locations as needed.</p> <p>BMDS test events are conducted at host installations designed to conduct same types of testing. MDA relies on installation's infrastructure and sensors. However, some BMDS components being tested are either the specific system under test or are brought in to augment those operated by the host range/installation. If adequate power is available from host installation, MDA will use available power. However, some systems require their own power. For example, the standalone tactical radar systems (e.g., the AN/TPY-2 radar) can either use available power or generator power; where as a missile interceptor and radar weapon system (e.g., THAAD or PAC-3 systems) requires the use of their own tactical generators. Other times, for test reliability purposes, the system under test will run off of host power (or shore power) and use tactical or operational generators as backup.</p>	Similar	Similar	Similar	
<b>Extraordinary Circumstances</b>	<p>BMDS test events can be delayed and equipment could be left at a test site for a while longer (e.g., several months) than anticipated.</p> <p>Presence of cultural, historical, biological resources or contamination.</p>	Same	Same	Same	
<b>Known Impacts from Proposed Action</b>	After 20+ years of testing, MDA knows of no known significant impacts from these types of activities including generator use beyond those resulting from accidental spills of fuel during fueling activities. Potential impacts are mitigated using spill containment equipment and fueling SOPs. Contaminated media is removed and treated IAW applicable regulations.	Same	Same	Same	

**Table B-21.2 Comparative Analysis of MDA CATEX B-21 to MDA Environmental Analyses.**

Benchmarking Categories	MDA	Theater High Altitude Area Defense (THAAD) Pacific Test Flights Environmental Assessment, December 2002, FONSI Signed	Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Environmental Impact Statement, July 2003	Mobile Launch Platform (MLP) Environmental Assessment, June 2004, FONSI Signed	Mobile Sensors Environmental Assessment, September 2005, FONSI Signed	Missile Defense Agency Ground-Based Midcourse Defense (GMD) Sea-Based X-Band (SBX) Radar Placement and Operation Adak, Alaska, October 2005, FONSI Signed	Missile Defense Agency Ballistic Missile Defense System (BMDS) Programmatic Environmental Impact Statement, January 2007	Relocatable In-Flight Interceptor Communications System Data Terminal (IDT) #2 at Vandenberg Air Force Base, Supplemental Environmental Assessment, November 2007, FONSI Signed
Applicable CATEXs	B-21							
<b>Characteristics of the Action</b>	<p>Routine installation and use of radars, telemetry systems, communications equipment, and other essentially similar facilities and equipment within a launch facility, mobile platform, military installation, training area, or previously disturbed area that conform to current ANSI/IEEE guidelines for maximum permissible exposure to electromagnetic fields. (REC required).</p> <p>Limited site preparations (e.g., grading, gravel road construction, filling, trenching, etc.) if any), are conducted; spill containment barriers are used to contain fuel spills and coolant leaks. Temporary fencing, lightning protection systems, and lighting would be installed per local requirements to minimize "shine."</p> <p>Cables can either lie on ground or be in conduit; if site conditions and time permits, cabling can be placed in shallow trenches dug in previously disturbed areas and utility easements.</p> <p>Diesel fuel provided by installation and conforms to air permit and local requirements (e.g., ultra low sulfur fuel).</p> <p>Installation and operation of equipment is confined to host installation (or in extremely limited instances, private property where similar actions are permitted).</p>	<p>The proposed action was to use an upgraded version of the THAAD Prototype Radar. The radar system consists of four individual units: (1) Antenna Equipment Unit, (2) Electronic Equipment Unit, (3) Cooling Equipment Unit, and (4) Prime Power Unit. There would be a maximum of two radars on location during flight testing. Only one radar would be operated at any given time. An electromagnetic radiation hazard exclusion area would be established in front and to the side of the THAAD radar antenna. The electromagnetic radiation hazard exclusion area for personnel would extend for 400 meters (1,312 feet) in front and to the side of the radar.</p>	<p>The proposed action, among other things, was to site, install/construct and operate various radars, telemetry systems, communications equipment, and other essentially similar facilities and equipment at additional launch and test facilities at various locations, including the SBX in the Pacific Region. Most tests would include the launch of a target missile; tracking by range and other land-based, sea-based, airborne, and space-based sensors; launch of an interceptor missile; target intercept; and debris impacting into BOA of the Pacific Ocean.</p>	<p>The proposed action, among other things, was to provide a mobile sea-based platform from which to more realistically test sensors (radars, telemetry, and optical systems) in support of MDA's mission. The MLP would also provide MDA the capability to use sensors at test support positions in remote areas of the ocean by locating these sensors on the MLP.</p>	<p>The proposed action was to use land-based mobile sensors (i.e., radar, telemetry and communication, command and control, and optical systems) and airborne sensor systems (i.e., optical and infrared systems) at various locations around the country. A test event may use any combination of mobile land-based and one of the airborne mobile sensors. The land-based mobile sensors would be transportable systems that could operate as autonomous systems or as part of an integrated sensor system. Airborne systems also could operate as autonomous systems, but typically would be part of an integrated sensor system.</p>	<p>The proposed action, among other things, was the operation of the SBX Radar while at the PSB and the use of onshore PSB assets and infrastructure to support SBX operations.</p>	<p>The proposed action, among other things, was the development or enhancement of BMDS sensors to acquire, record, and process data on threat missiles and interceptor missiles; detect and track threat missiles; direct interceptor missiles or other defenses (e.g., lasers); and assess whether a threat missile has been destroyed.</p>	<p>The proposed action in part was the siting, construction and operation of a second RIDT, at a site adjacent to the existing RIDT along El Rancho Road on Vandenberg AFB.</p>
<b>Methods of Implementing the Action</b>	<p>Obtain test plan and CONOPs from MDA test proponent.</p> <p>Work with host installation or property owner to find suitable location and permission to install and operate equipment.</p>	Same	Same	Same	Same	Temporary placement.	Same	Permanent installation and operation.

Benchmarking Categories	MDA	Theater High Altitude Area Defense (THAAD) Pacific Test Flights Environmental Assessment, December 2002, FONSI Signed	Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Environmental Impact Statement, July 2003	Mobile Launch Platform (MLP) Environmental Assessment, June 2004, FONSI Signed	Mobile Sensors Environmental Assessment, September 2005, FONSI Signed	Missile Defense Agency Ground-Based Midcourse Defense (GMD) Sea-Based X-Band (SBX) Radar Placement and Operation Adak, Alaska, October 2005, FONSI Signed	Missile Defense Agency Ballistic Missile Defense System (BMDS) Programmatic Environmental Impact Statement, January 2007	Relocatable In-Flight Interceptor Communications System Data Terminal (IDT) #2 at Vandenberg Air Force Base, Supplemental Environmental Assessment, November 2007, FONSI Signed
Applicable CATEXs	B-21							
	<p>Work with host installation to identify applicable laws, regulations, and SOPs.</p> <p>Work with host installation to either review existing documentation and/or prepare necessary NEPA documentation.</p> <p>Work with host installation or property owner to conduct any required site preparation activities.</p> <p>Deploy equipment to site, install, test, and operate equipment per Test CONOPs.</p> <p>Retrograde equipment and restore site to original condition (or agreed upon condition – e.g., leaving behind grounding grids or sound barriers).</p>							
Frequency of the Actions	Generally one time. However, at larger installations, MDA could conduct up to two tests/year at any given location.	One time	Generally one time per location. Deployment could occur at two to three locations per year.	MLP could be used two to three times per year.	Generally one time per location. Deployment could occur at two to three locations per year.	Completed—SBX is currently at Pearl Harbor	Generally one time per location. Deployment could occur at two to three locations per year.	One time – IDT operates 24/7
Applicable Regulations	NEPA, ESA, NHPA, ARPA, CERCLA, CWA, CAA, and other applicable Federal and state regulations, DoD and Service requirements, and industry standards.	Same	Same	Same	Same	Same	Same	Same
Applicable SOPs	Installation/Manufacturer specific SOPs and BMPs	Same	Same	Same	Same	Same	Same	Same
Timing and Context	<p>Radars and support equipment are used to support BMDS test events that could occur any time of the year. Equipment, many times, is tactical or operational equipment and is in short supply; therefore, it is moved to other locations as needed.</p> <p>BMDS test events are conducted at host installations designed to conduct same types of testing. MDA relies on installation's infrastructure and sensors. However, some BMDS</p>	Same	Same	Same	Same	Same	Same	24 hours/7 days a week operations.

Benchmarking Categories	MDA	Theater High Altitude Area Defense (THAAD) Pacific Test Flights Environmental Assessment, December 2002, FONSI Signed	Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Environmental Impact Statement, July 2003	Mobile Launch Platform (MLP) Environmental Assessment, June 2004, FONSI Signed	Mobile Sensors Environmental Assessment, September 2005, FONSI Signed	Missile Defense Agency Ground-Based Midcourse Defense (GMD) Sea-Based X-Band (SBX) Radar Placement and Operation Adak, Alaska, October 2005, FONSI Signed	Missile Defense Agency Ballistic Missile Defense System (BMDS) Programmatic Environmental Impact Statement, January 2007	Relocatable In-Flight Interceptor Communications System Data Terminal (IDT) #2 at Vandenberg Air Force Base, Supplemental Environmental Assessment, November 2007, FONSI Signed
Applicable CATEXs	B-21							
	components being tested are either the specific system under test or are brought in to augment those operated by the e range/installation. If adequate power is available from host installation, MDA will use available power. However, some systems require their own power. For example, the standalone tactical radar systems (e.g., the AN/TPY-2 radar) can either use available power or generator power; where as a missile interceptor and radar weapon system (e.g., THAAD or PAC-3 systems) requires the use of their own tactical generators. Other times, for test reliability purposes, the system under test will run off of host power (or shore power) and use tactical or operational generators as backup.							
<b>Extraordinary Circumstances</b>	BMDS test events can be delayed and equipment could be left at a test site for a while longer (e.g., several months) than anticipated.  Presence of cultural, historical, biological resources or contamination.	Same	Same	Same	Same	Same	Same	Same
<b>Known Impacts from Proposed Action</b>	After 20+ years of testing, MDA knows of no known significant impacts from these types of activities including generator use beyond those resulting from accidental spills of fuel during fueling activities. Potential impacts are mitigated using spill containment equipment and fueling SOPs. Contaminated media is removed and treated IAW applicable regulations.	Over the course of 6 years, MDA conducted a-half dozen THAAD tests at the PMRF and no significant environmental impacts were observed as documented in mitigation monitoring reports.	Since the construction of the GMD ETR, MDA has conducted an average of one-two flight tests a year using sensors and radars and operated the SBX nearly continuously and no significant environmental impacts were observed.	The MLP has been used on average of two to five missions per year since 2005 and no significant environmental impacts have been observed.	MDA has conducted numerous test activities using mobile sensors and their supporting diesel-fueled generators and other support equipment and no significant environmental impacts have been observed.	No significant environmental impacts were observed during the operation of the site. The SBX has since vacated the site.	MDA has conducted at least four tests every year at locations around the world and no significant environmental impacts resulting from the use radars, sensors and support equipment including diesel-fueled generators have been reported	No significant environmental impacts have been observed as a result of MDA's construction and operation of the IDT #2 and supporting facilities.

## IV. ACRONYMS AND ABBREVIATIONS

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ABIR	Air-borne Infrared Radar
ABL	Airborne Laser
ABV	Alternate Boost Vehicle
ACM	Asbestos containing material
AF813	Air Force Form 813
AFB	Air Force Base
AFS	Air Force Station
ANSI	American National Standards Institute
AR	Administrative Record
ARPA	Archaeological Resources Protection Act
AT&C	Assembly, Test, and Checkout
ATK	Alliant Techsystems
AT&L	Acquisition, Technology and Logistics
BCSC-T	Ballistic Missile Defense System Communication Support Complex- Transportable
BMDS	Ballistic Missile Defense System
BMP	Best Management Practice
BRAC	Base Realignment and Closure
BOA	Broad Ocean Area
BOE	Bureau of Explosives
BV	Booster Vehicle
CAA	Clean Air Act
CATEX	Categorical Exclusion
C2BMC	Command, Control, Battle Management and Communications
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CONOPS	Continuity of Operations
COTS	Commercial-Off-The-Shelf
CWA	Clean Water Act
D/D	Dismantlement or Distruction
DF	Deuterium Flouride
DAC	Divert Altitude Control
DLA	Defense Logistics Agency
DoD	Department of Defense
DON	Department of Navy
DOT	Department of Transportation
DPF	MDA Facilities, Military Construction and Environmental Management Directorate
DSE	Distributed Sensing Equipment
EA	Environmental Assessment
ECF	Entry Control Facility
ECP	Entry Control Point
EIS	Environmental Impact Statement

EKV	Exo-atmospheric Kill Vehicle
EO	Executive Order
EOD	Explosive Ordnance Demolition
EPA	Environmental Protection Agency
EPF	Environmental Planning Function
ER	Environmental Review
ERA	Environmental Restoration Account
ESA	Endangered Species Act
ETR	Extended Test Range
EWR	Early Warning Radar
FAA	Federal Aviation Administration
FACO	Final Assembly and Checkout Operations
FBX-T	Forward-based X-band Transportable
FEMA	Federal Emergency Management Agency
FOC	Fiber Optic Cable
FONSI	Finding of No Significant Impact
FTG	Flight Test Ground-based Interceptor
GBI	Ground-based Interceptor
GMD	Ground-based Midcourse Defense
GPR	Ground Penetrating Radar
GSA	General Services Agency
HE	High Explosive
HELSTF	High Energy Laser System Test Facility
HMTA	Hazardous Materials Transportation Act
HVAC	Heating, Venting and Air Conditioning
IAW	In Accordance With
ICRMP	Integrated Cultural Resources Management Plan
IDOC	Initial Defensive Operations Capability
IDT	Integrated Data Terminal
IEEE	Institute of Electrical and Electronics Engineers
IFT	Integrated Flight Test
IMF	Integrated Maintenance Facility
INRMP	Integrated Natural Resources Management Plan
ISCP	Installation Spill Contingency Plan
ISFAC	Integrated Data Terminal Support Facility
ISTEF	Innovative Science and Technology Experimentation Facility
KEI	Kinetic Energy Interceptor
KPTS	Kaena Point Satellite Tracking Station
LBP	Lead-based Paint
LF	Launch Facility
LFT&E	Live Fire Test and Evaluation
LPM	Liquid Propellant Missile
LPS	Lightning Protection System
MAB	Missile Assembly Building
MAF	Missile Assembly Facility
MARAD	Maritime Administration

MDA	Missile Defense Agency
MeV	Mega Electron Volt
MIT/LL	Massachusetts Institute of Technology/Lincoln Laboratory
MLP	Mobile Launch Platform
MMH	Monomethyl-hydrazine
MODUK	Ministry of Defense, United Kingdom
MRSS	Mobile Range Safety System
MS2	Mission Systems and Sensors
NASNI	Naval Air Station North Island
NCR	National Capital Region
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMD	National Missile Defense
N <sub>2</sub> O <sub>4</sub>	Dinitrogen Tetraoxide
NOAA	National Oceanic and Atmospheric Administration
NSE	Naval Station Everett
OSHA	Occupational Safety and Health Act
OUSD	Office of Under Secretary of Defense
PC	Pacific Collector
PCB	Polychlorinated biphenyls
PDS	Protective Distribution System
PEA	Programmatic Environmental Assessment
PEIS	Programmatic Environmental Impact Statement
PL	Protection Level
PMRF	Pacific Missile Range Facility
PSB	Primary Support Base
PT	Pacific Tracker
RAMOS	Russian-American Observation Satellites
RCE	Record of Categorical Exclusion
RCRA	Resource Conservation and Recovery Act
RDT&E	Research, Development, Testing, and Evaluation
REC	Record of Environmental Consideration
RIDT	Relocatable Integrated Data Terminal
ROD	Record of Decision
RSTS	Range Safety Telemetry System
RV	Re-entry Vehicle
SATCOM	Satellite Communication
SBX	Sea-Based X-Band
SEA	Supplemental Environmental Assessment
SHOTS	Stabilized High-Accuracy Optical Tracking System
SPCC	Spill Prevention, Control and Countermeasures
SRMSC	Stanley R. Mickelsen Safeguard Complex
SOP	Standard Operating Procedure
SWFPAC	Strategic Weapons Facility Pacific
TBP	Tributyl Phosphate
THAAD	Theater High Altitude Area Defense

TMS	Target Missile System
TPS-X	Transportable System X-Band Radar
TRACS	Transportable Range Augmentation Control System
TSCA	Toxic Substances Control Act
TSMRI	Ted Stevens Marine Research Institute
TTS	Transportable Telemetry System
UES	USAKA Environmental Standards
UPS	Uninterrupted Power Supply
USAKA	United States Army Kwajalein Atoll
USAF	United States Air Force
USCG	United States Coast Guard
USC	United States Code
VOC	Validation of Concept
WASP	Wide Body Airborne Sensor Platform
WSMR	White Sands Missile Range

## V. QUALIFICATION OF PREPARERS

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### **Buff L. Crosby, Ph.D.**

**Qualifications:** Dr. Crosby has over 20 years of experience in environmental compliance, environmental management (including land, water, and natural resource management), policy and environmental-related strategy development. Dr. Crosby has held several technical and leadership roles in a federal agency responsible for managing public lands, natural resource management, and improving water quality. Dr. Crosby is experienced in environmental policy development, Environmental Management Systems (EMS), National Environmental Policy Act (NEPA), Endangered Species Act (ESA) and National Historic Preservations Act (NHPA) compliance requirements.

### **Kevin L. Call**

**Qualifications:** Over 25 years experience in environmental law, involving most major environmental disciplines, with an emphasis in NEPA law and practice, both as an active-duty Army Judge Advocate (JA) Officer and civilian attorney within the Army and DoD.

### **Mark Ethridge**

**Qualifications:** Mr. Ethridge has 34 years of experience in environmental management and the analysis of environmental impact, regulatory compliance, and due diligence issues.

### **Howard S. Finkel, P.E.**

**Qualifications:** Mr. Finkel, P.E., is a registered environmental engineer with 30 years of experience in environmental science/engineering and regulatory analysis in the areas of: waste generation, characterization, and management; pollution prevention, environmental management systems, risk assessment; and environmental site assessments.

### **Eric N. Sorrells, PE**

**Qualifications:** Over 25 years experience in facilities and environmental management, involving most major environmental disciplines, with an emphasis in NEPA compliance, both as an active-duty Naval Officer, contractor and government civilian within the Navy and DoD.

### **Daniel L. Spiegelberg, PE**

**Qualifications:** A registered professional engineer with more than 40 years experience in environmental and facilities management, including 15 years experience in Ballistic Missile Defense System (BMDS) environmental management as a contractor and government employee, 20 years experience in environmental and facilities engineering and management as a commissioned officer in the United States Navy Civil Engineer Corps, and 6 years experience as a contractor providing environmental services to other federal clients.

**Joseph B. Venable, PE**

**Qualifications:** More than 40 years experience in environmental and facilities management, which includes 13 years experience in Ballistic Missile Defense System (BMDS) environmental management and 25 years of military operations, facilities and utilities acquisition and engineering management experience as a commissioned officer in the Civil Engineer Corps, United States Navy.

**George M. Wheeler, PE, PMP**

**Qualifications:** A registered professional engineer with more than 36 years of progressive and successful engineering experience in the Department of Defense environment. He has performed independent engineering studies supporting facility infrastructure design and led or participated on multi-disciplinary study teams that analyzed facilities planning documents for regulatory compliance and technical feasibility, identified potential risks to cost, schedule, and performance, and proposed mitigation measures protective of the human environment and the government's interests. He has managed environmental compliance and protection activities at a 3,000 acre military facility, directed training and operations for engineer units comprising more than 900 personnel and multiple occupational specialties, and provided environmental compliance management advice at the military agency headquarters level. He holds advanced degrees in information systems and environmental engineering and is a certified Project Management Professional.