SUBJECT: Environmental and Explosives Safety Management on Operational Ranges Within the United States

References: (a) DoD Directive 4715.11, Environmental and Explosives Safety Management on Department of Defense Active and Inactive Ranges Within the United States," August 17, 1999 (hereby canceled)
(c) DoD Directive 6055.9, "DoD Explosives Safety Board (DDESB) and Component Explosives Safety Responsibilities," July 29, 1996
(d) DoD Directive 4715.12, "Environmental and Explosives Safety Management on Department of Defense Operational Ranges Outside the United States," August 17, 1999
(e) through (m), see enclosure 1

1. REISSUANCE AND PURPOSE

This Directive reissues reference (a) to establish policy and assign responsibilities under references (b) and (c) for:

1.1. Sustainable use and management of operational ranges located within the United States.

1.2. The protection of DoD personnel and the public from explosive hazards on operational ranges located within the United States.

2. APPLICABILITY AND SCOPE

This Directive applies to:
Environmental and Explosives Safety Management on Operational Ranges Within the United States

Department of Defense, Washington, DC, 20301-3400

Approved for public release; distribution unlimited

<table>
<thead>
<tr>
<th>1. REPORT DATE</th>
<th>2. REPORT TYPE</th>
<th>3. DATES COVERED</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 MAY 2004</td>
<td></td>
<td>00-00-2004 to 00-00-2004</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. TITLE AND SUBTITLE</th>
<th>5a. CONTRACT NUMBER</th>
<th>5b. GRANT NUMBER</th>
<th>5c. PROGRAM ELEMENT NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental and Explosives Safety Management on Operational Ranges Within the United States</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. AUTHOR(S)</th>
<th>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Department of Defense, Washington, DC, 20301-3400</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. PERFORMING ORGANIZATION REPORT NUMBER</th>
<th>9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)</th>
<th>10. SPONSOR/MONITOR’S ACRONYM(S)</th>
<th>11. SPONSOR/MONITOR’S REPORT NUMBER(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12. DISTRIBUTION/AVAILABILITY STATEMENT</th>
<th>13. SUPPLEMENTARY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved for public release; distribution unlimited</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14. ABSTRACT</th>
<th>15. SUBJECT TERMS</th>
<th>16. SECURITY CLASSIFICATION OF:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>a. REPORT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>unclassified</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>17. LIMITATION OF ABSTRACT</th>
<th>18. NUMBER OF PAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same as Report (SAR)</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>19a. NAME OF RESPONSIBLE PERSON</th>
<th>20. SECURITY CLEARANCE OF RESPONSIBLE PERSON</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.1. The Office of the Secretary of Defense, the Military Departments, the Chairman of the Joint Chiefs of Staff and the Joint Staff; the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities in the Department of Defense (hereafter referred to collectively as "the DoD Components").

2.2. All operational ranges located within the United States.

2.2.1. For operational ranges that a non-DoD Component owns, this Directive applies subject to the terms of any agreement with the owner for the leasing or operation of the range. (The DoD Components shall attempt to ensure that future agreements are consistent with this Directive and provide for non-DoD users to proportionally reimburse the DoD Component for the costs of complying with this Directive.)

2.2.2. When a DoD Component other than the DoD Component exercising real property accountability operates an operational range, responsibility for compliance with this Directive is assigned to the operating DoD Component, unless the two parties agree otherwise.

2.3. This Directive does not apply to operational ranges located outside the United States. For such operational ranges, consult DoD Directive 4715.12 (reference (d)).

2.4. This Directive does not apply to indoor ranges.

3. DEFINITIONS

Terms used in this Directive are defined in enclosure 2. Other terms are defined in 10 U.S.C. 101 (reference (e)).

4. POLICY

It is DoD policy to:

4.1. Use and manage operational ranges in a manner that supports national security objectives and maintains the high state of operational readiness essential to the U.S. Armed Forces, consistent with DoD Directive 3200.15 (reference (f)).

4.2. Ensure the long-term viability of operational ranges while protecting human health and the environment.
4.3. Limit, to the extent practical, the potential for explosives mishaps and the damaging effects of such to personnel, operational capability, property, and the environment.

4.4. Resolve conflicts between explosive safety and other requirements with the objective of minimizing explosives hazards.

4.5. Design and use operational ranges and the munitions used on them, to the extent practical, to minimize both potential explosive hazards and harmful environmental impacts and to promote resource recovery and recycling.

4.6. Enhance the ability to prevent or respond to a release or substantial threat of a release of munitions constituents from an operational range to off-range areas.

5. RESPONSIBILITIES

5.1. The Under Secretary of Defense for Personnel and Readiness shall provide guidance to ensure DoD training ranges meet the operational requirements necessary to support national security objectives and maintain the high state of operational readiness essential to the U.S. Armed Forces.

5.2. The Under Secretary of Defense (Comptroller) shall provide financial management policy regarding operational range management activities in accordance with DoD 7000.14-R (reference (g)).

5.3. The Under Secretary of Defense For Acquisition, Technology, and Logistics shall:

5.3.1. Take overall OSD responsibility for safety, explosives safety, environmental, and technology policies related to implementation of this Directive.

5.3.2. Develop acquisition plans, strategies, guidance, and assessments to implement this Directive.

5.3.3. Ensure that research, development, test, and evaluation (RDT&E) programs address technology requirements to enhance sustainable range management.

5.3.4. Have OSD staff responsibility for all safety, explosives safety (through the Chair, Department of Defense Explosives Safety Board), and environmental policy and oversight related to implementation of this Directive.
5.3.5. Be the OSD proponent for operational range clearance technology requirements and coordinate such requirements with the Director, Test, Systems Engineering, and Evaluation.

5.3.6. Designate a DoD Component as Executive Agent responsible for:

5.3.6.1. The coordination of Joint Service operational ranges clearance technology requirements. (The Executive Agent shall coordinate such requirements affecting the explosives ordnance disposal (EOD) mission area with the Executive Manager for EOD Technology and Training.)

5.3.6.2. The transition of these requirements into technology programs.

5.3.7. Coordinate DoD Component efforts to assess the environmental impacts of munitions use on operational ranges.

5.3.8. Provide guidance to all DoD Components on establishing and maintaining complete inventories of operational ranges.

5.3.9. Provide guidance to enhance the DoD Components’ ability to prevent or respond to a release or substantial threat of a release of munitions constituents from an operational range to off-range areas.

5.4. The Heads of the DoD Components shall:

5.4.1. Establish the necessary procedures to ensure that DoD Component operational ranges comply with this Directive and include sustainable range management goals in long-term planning efforts.

5.4.2. Establish and maintain an inventory of DoD Component operational ranges consistent with the guidance provided by the Deputy Under Secretary of Defense for Installations and Environment.

5.4.3. Establish and implement procedures to assess the environmental impacts of munitions use on operational ranges.

5.4.4. Ensure that required management plans at the installation or responsible activity level include planning for sustainable range use and are reviewed or updated at least every 5 years. Management plans for new ranges shall be in place prior to utilization of the range. This planning, at a minimum, will address: long-term sustainable use; hydrology and hydrogeology; management procedures; record keeping;
standards; monitoring; public outreach and public participation programs, if required; technology requirements to ensure sustainable range management; integration with other installation planning processes; and resources.

5.4.5. Establish procedures for range clearance operations to permit the sustainable safe use of operational ranges for their intended purpose. To determine the frequency and degree of range clearance operations, consider, at a minimum, the safety hazards of clearance, each range’s intended use, and the quantities and types of munitions expended on that range.

5.4.6. Restrict access to operational ranges, especially impact areas and other areas suspected of containing unexploded ordnance (UXO).

5.4.6.1. Take appropriate action to prevent unauthorized access to operational ranges. Such actions include establishing access controls (e.g., posting UXO hazard warning signs, fencing the area, establishing roving security patrols) and providing public notifications of potential explosive hazards.

5.4.6.2. Provide appropriate explosives safety training to individuals authorized access to operational ranges before they enter the range. The DoD Components shall develop guidelines to determine when individuals authorized access to operational ranges shall be escorted.

5.4.7. Provide appropriate information to local officials regarding the compatible uses of non-DoD property located near operational ranges.

5.4.8. For operational ranges, maintain permanent records of:

5.4.8.1. All military munitions expended, including an estimated dud rate, by type, quantity, location, and using organization.

5.4.8.2. All range clearance operations or EOD incidents conducted on the operational range.

5.4.8.3. The coordinates of all areas known or suspected of containing UXO. (Installation master plans or range maps shall be used to document such areas.)

5.4.9. Minimize the use on operational ranges, including for RDT&E, of munitions that contain submunitions or depleted uranium (DU) to that required to support national security objectives.
5.4.9.1. For submunitions, restrict such use to specifically designated target or impact areas.

5.4.9.2. For DU, restrict such use to specifically designated Nuclear Regulatory Commission-licensed target or impact areas. When possible, DU shall be fired into containment fixtures, and high-explosive munitions shall not be fired into the same area as DU.

5.4.9.3. When practical, establish sole use target or impact areas to segregate such munitions from other munitions.

5.4.10. To the extent practicable, use targets on operational ranges that do not contain hazardous materials (e.g., petroleum, oils, lubricants, radium dials, and batteries).

5.4.11. Conduct a hazard assessment before any range clearance operation at operational ranges. This assessment shall include, at a minimum, rationale for the clearance, the number of personnel involved, support requirements, the types of munitions anticipated to be encountered, and expected UXO contamination levels. When range clearance is an integral part of a test or training plan, a hazard assessment shall be included.

5.4.12. Establish safe and practical methods for recycling or disposing of range residues in accordance with DoD 4160.21-M (reference (h)). Ensure that material potentially presenting an explosive hazard is managed in a manner that supports operational readiness and mission requirements and that complies with explosives safety standards and environmental requirements.

5.4.13. Prohibit controlled burning of vegetation as a method of operational range clearance. Controlled burns may be used to control dense brush or undergrowth or clear a range area of vegetation to make range clearance operations safe for personnel conducting the clearance.

5.4.14. Assess or review prior assessments of the hydrology and hydrogeology of operational ranges and how the ranges are being or have been used.

5.4.15. Where prior hydrologic and hydrogeologic assessments create a reasonable belief that munitions constituents may migrate off an operational range, conduct an additional, appropriate assessment, including testing and analysis, as necessary, to determine whether a release or substantial threat of a release of munitions constituents from an operational range to off-range areas has occurred or is about to occur.
5.4.16. Ensure procedures are in place to:

5.4.16.1. Notify installation personnel and the public, as appropriate, of range operations that may present an explosive hazard off the operational range.

5.4.16.2. Respond promptly to protect personnel and property from such hazards, both on and off the installation.

5.4.17. Participate, as appropriate, in established national public-involvement programs, including dialogues with interested members of the public, to discuss and explain the explosive hazards associated with operational ranges.

5.4.18. Ensure range issues that affect or have the potential to affect the surrounding communities (e.g., controlled burns, access controls, institutional controls) are addressed in appropriate local public participation forums.

5.4.19. Establish a program to educate DoD personnel, their dependents, and private citizens living near operational ranges on the explosive hazards associated with unexploded ordnance and trespassing on operational ranges.

5.4.20. Before changing the use of a range area, conduct appropriate range clearance operations consistent with the proposed use of the area.

5.4.21. Respond, in accordance with the Department of Defense's explosives safety authority (10 U.S.C. 172 (reference (i))), as implemented in reference (c) and DoD 6055.9-STD (reference (j)) and response authorities (10 U.S.C. 2701; 42 U.S.C. 9604; and Executive Order 12580, Sec. 2(d) (references (k) through (m))) to a release or substantial threat of a release of munitions constituents from an operational range to off-range areas, when such release poses an imminent and substantial threat to human health or the environment.
6. **EFFECTIVE DATE**

This Directive is effective immediately.

Paul Wolfowitz
Deputy Secretary of Defense

Enclosures - 2
E1. References, continued
E2. Definitions
E1. ENCLOSURE 1

REFERENCES, continued

(e) Section 101 of title 10, United States Code
(f) DoD Directive 3200.15, "Sustainment of Ranges and Operating Areas (OPAREAs)," January 10, 2003
(g) DoD 7000.14-R, "DoD Financial Management Regulations (FMRs)," current edition
(i) Section 172 of title 10, United States Code
(j) DoD 6055.9-STD, "DoD Ammunition and Explosives Safety Standards," July 1, 1999
(k) Section 2701 of title 10, United States Code
(l) Section 9604 of title 42, United States Code
E2. ENCLOSURE 2

DEFINITIONS

E2.1.1. Explosives Mishap. An accident or unexpected event involving DoD ammunition and explosives.

E2.1.2. Explosives Safety. A condition where operational capability and readiness, personnel, property, and the environment are protected from the unacceptable risk of a mishap involving military munitions.

E2.1.3. Impact Area. The identified area within a range intended to capture or contain ammunition, munitions, or explosives and resulting debris, fragments, and components from various weapon system employments.

E2.1.4. Munitions Constituents. Any materials originating from unexploded ordnance, discarded military munitions, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

E2.1.5. Operational Range. A range that is under the jurisdiction, custody, or control of the Secretary of Defense and:

E2.1.5.1. Is used for range activities; or

E2.1.5.2. Although not currently being used for range activities, that is still considered by the Secretary to be a range and has not been put to a new use that is incompatible with range activities.

E2.1.6. Submunition. Any munition that, to perform its task, separates from a parent munition.

E2.1.7. Sustainable Range Management. Management of an operational range in a manner that:

E2.1.7.1. Supports national security objectives and maintains the operational readiness of the Armed Forces; and

E2.1.7.2. Ensures the long-term viability of operational ranges while protecting human health and the environment.
E2.1.8. **United States.** The States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Marianas Islands, American Samoa, Guam, Johnston Atoll, Kingman Reef, Midway Island, Nassau Island, Palmyra Island, the U.S. Virgin Islands, Wake Island, and any other territory or possession over which the United States has jurisdiction, and associated navigable waters, contiguous zones, and ocean waters of which the natural resources are under the exclusive management authority of the United States.