

Department of Defense INSTRUCTION

NUMBER 4140.62 November 25, 2008

USD(AT&L)

SUBJECT: Material Potentially Presenting an Explosive Hazard

References: See Enclosure 1

1. <u>PURPOSE</u>. This Instruction:

- a. Reissues DoD Instruction (DoDI) 4140.62 (Reference (a)) in accordance with the authority in DoD Directives (DoDDs) 4140.1 and 5134.01 (References (b) and (c)) to update policy and responsibilities for the management and disposition of material potentially presenting an explosive hazard (MPPEH).
- b. Authorizes other publications related to and supporting MPPEH including, but not limited to, a DoD Manual for the management and disposition of MPPEH.

2. <u>APPLICABILITY</u>. This Instruction:

- a. Applies to OSD, the Military Departments, the Office of 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 within the Department of Defense (hereafter referred to collectively as the "DoD Components").
- b. Applies to all MPPEH, material documented as an explosive hazard (MDEH), and material documented as safe (MDAS) under the control of the Department of Defense and its contractors, to the extent provided in contracts.
- c. Does not apply to the transfer within or release from DoD control of military munitions that are to be used for their intended purpose. (See Glossary for definition of "transferred within or released from DoD control.")
- d. Does not apply to persons outside of the Department of Defense other than defense contractors as provided in contracts.

- 3. <u>DEFINITIONS</u>. See Glossary.
- 4. <u>POLICY</u>. It is DoD policy to:
- a. Manage MPPEH in a manner that supports operational readiness and mission requirements in accordance with DoDD 3200.15 (Reference (d)) and in compliance with supply chain materiel management policies (Reference (b)), explosives safety standards (DoD 6055.09-STD (Reference (e))), and environmental requirements (DoDD 4715.1E; DoDI 4715.4; DoDI 4715.6; and subpart M of part 266 of title 40, Code of Federal Regulations (References (f) through (i))), to the extent applicable.
- b. By contract or other legal agreement, require compliance with MPPEH management procedures by all non-DoD entities that possess, manage, process, or provide disposition of MPPEH or MDEH for the Department of Defense.
 - c. As part of the MPPEH management process, manage:
 - (1) MDEH in such a manner as to prevent it from being:
 - (a) Commingled with MPPEH or MDAS.
- (b) Misidentified as MPPEH or MDAS once the explosive hazards it presents have been determined.
 - (2) MDAS in such a manner as to prevent it from being:
 - (a) Commingled with MPPEH or MDEH.
 - (b) Misidentified as MPPEH or MDEH once it has been determined to be safe.
- 5. RESPONSIBILITIES. See Enclosure 2.
- 6. <u>PROCEDURES</u>. Enclosure 3 provides procedures for military munitions acquisition programs and for the management of MPPEH, including implementing guidance and demilitarization requirements.
- 7. <u>RELEASABILITY</u>. UNLIMITED. This Instruction is approved for public release. Copies may be obtained through the Internet from the DoD Issuances Web Site at http://www.dtic.mil/whs/directives.

8. <u>EFFECTIVE DATE</u>. This Instruction is effective immediately.

John/J./Young/Jr.

Under Secretary of Defense fo

Acquisition, Technology, and Logistics

Enclosures

- 1. References
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Glossary

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ENCLOSURE 1

REFERENCES

- (a) DoD Instruction 4140.62, "Management and Disposition of Material Potentially Presenting an Explosive Hazard (MPPEH)," December 3, 2004 (hereby canceled)
- (b) DoD Directive 4140.1, "Supply Chain Materiel Management Policy," April 22, 2004
- (c) DoD Directive 5134.01, "Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L))," December 9, 2005
- (d) DoD Directive 3200.15, "Sustainment of Ranges and Operating Areas (OPAREAs)," January 10, 2003
- (e) DoD 6055.09-STD, "DoD Ammunition and Explosives Safety Standards," February 29, 2008
- (f) DoD Directive 4715.1E, "Environment, Safety, and Occupational Health (ESOH)," March 19, 2005
- (g) DoD Instruction 4715.4, "Pollution Prevention," June 18, 1996
- (h) DoD Instruction 4715.6, "Environmental Compliance," April 24, 1996
- (i) Subpart M of part 266 of title 40, Code of Federal Regulations
- (j) DoD 4100.39-M, "Federal Logistics Information System (FLIS) Procedures Manual Glossary and Volumes 1-16," current edition
- (k) DoD Directive 5160.65, "Single Manager for Conventional Ammunition (SMCA)," August 1, 2008
- (l) DoD 4160.21-M-1, "Defense Demilitarization Manual," October 1, 1991
- (m) DoD 4145.26-M, "DoD Contractors' Safety Manual for Ammunition and Explosives," March 13, 2008
- (n) DoD Instruction 5160.68, "Single Manager for Conventional Ammunition (SMCA): Responsibilities of the SMCA and the Military Services," December 22, 2003
- (o) DoD Explosives Safety Board Technical Paper 18, "Minimum Qualifications for Unexploded Ordnance (UXO) Technicians and Personnel," December 20, 2004
- (p) DoD 5100.76-M, "Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives," August 12, 2000
- (q) DoD Instruction 6055.07, "Accident Investigation, Reporting, and Record Keeping," October 3, 2000
- (r) Sections 2577 and 4690(c) of title 10, United States Code

ENCLOSURE 2

RESPONSIBILITIES

- 1. <u>UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS (USD(AT&L))</u>. The USD(AT&L) shall oversee performance of the responsibilities specified in this Instruction, to include directing the Director, Defense Logistics Agency (DLA), to establish and approve demilitarization and disposition requirements for MPPEH, MDEH, and MDAS.
- 2. <u>DEPUTY UNDER SECRETARY OF DEFENSE FOR INSTALLATIONS AND ENVIRONMENT (DUSD(I&E)</u>. The DUSD(I&E), under the authority, direction, and control of the USD(AT&L), shall:
- a. Have overall responsibility for and oversight of environmental, safety (including explosives safety), and occupational health matters related to implementation of this Instruction.
- b. In coordination with the Deputy Under Secretary of Defense for Logistics and Material Readiness (DUSD(L&MR)), develop:
- (1) MPPEH management procedures, including procedures for managing material for which the explosives safety status has been determined.
- (2) Qualification standards for the DoD Components and personnel involved in storing, handling, processing (i.e., collecting, securing, sorting, segregating, inspecting, decontaminating, and demilitarizing), and transporting MPPEH.
- (3) Qualification standards for non-DoD entities or individuals involved in processing MPPEH to which this Instruction applies.
- c. Monitor implementation of this Instruction and issue additional guidance and direction as necessary.
- 3. <u>DUSD(L&MR)</u>. The DUSD(L&MR), under the authority, direction, and control of the USD(AT&L), shall:
 - a. Ensure uniform implementation of MPPEH management procedures.
- b. Monitor the effectiveness and efficiency of logistics systems related to implementation of this Instruction.
- c. Ensure that DoD 4100.39-M (Reference (j)) provides cataloging data and turn-in requirements for used or demilitarized military munitions.

- 4. <u>DIRECTOR, DEFENSE RESEARCH AND ENGINEERING (DDR&E)</u>. The DDR&E, under the authority, direction, and control of the USD(AT&L), shall act as the OSD proponent for technology that is required to:
- a. Detect the presence of explosives on MPPEH and determine the composition of those explosives to allow a determination of whether any explosives present pose an explosive hazard.
 - b. Improve MPPEH processing.
- 5. <u>DIRECTOR, DLA</u>. The Director, DLA, under the authority, direction, and control of the DUSD(L&MR), shall, in coordination with the Military Services and the U.S. Army as the Single Manager for Conventional Munitions (SMCA) pursuant to DoDD 5160.65 (Reference (k)), establish demilitarization requirements for MPPEH, MDEH, and MDAS according to DoD 4160.21-M-1 (Reference (l)).
- 6. <u>HEADS OF THE DoD COMPONENTS</u>. The Heads of the DoD Components shall:
 - a. Comply with the requirements of this Instruction.
- b. Control and manage MPPEH and MDEH to prevent its unauthorized use, transfer, or release.
- c. Ensure the management of MPPEH, MDEH, and MDAS complies with supply chain material management policies (Reference (b)), explosives safety standards (Reference (e)), and environmental requirements (References (f) through (i)).
- d. Ensure MPPEH management procedures are applied and MPPEH holding areas are included in local facility threat assessments.
- e. Implement this Instruction and subsequent implementing guidance by providing necessary procedures, programs, and funds.
- f. Establish a certification program that requires DoD Component personnel who have responsibilities associated with MPPEH, MDEH, and the determination of MDAS to meet the qualifications and requirements established in section 2 of Enclosure 3.
- g. Ensure that contracts or other legal agreements with non-DoD entities for MPPEH possession, management, and processing require non-DoD entities to comply with MPPEH management procedures and DoD 4145.26-M (Reference (m)).
- h. Ensure that the storage, handling, processing, and transportation of MPPEH and MDEH comply with the standards in Reference (e).

- i. Coordinate with the Director, DLA, to establish demilitarization requirements for MPPEH, MDEH, and MDAS.
- 7. <u>SECRETARY OF THE ARMY</u>. The Secretary of the Army, as the SMCA, shall:
- a. Dispose of and demilitarize military munitions within the DoD munitions management system. (See Reference (l) and DoDI 5160.68 (Reference (n)).)
- b. Provide procedures to demilitarize unused SMCA-managed military munitions (Class V items) while complying with policy for demilitarization, disposal, and trade security.
- 8. <u>CHAIR, DoD EXPLOSIVES SAFETY BOARD (DDESB)</u>. The DDESB Chair shall direct the DDESB in the development and recommendation of supplemental explosives safety standards for all activities associated with MPPEH and MDEH for submission through the DUSD(I&E) to the USD(AT&L) for approval.

ENCLOSURE 3

PROCEDURES

- 1. <u>MILITARY MUNITIONS ACQUISITION PROGRAMS</u>. Program managers for military munitions acquisition programs shall, in conformance with the MPPEH management procedures in section 2 of this enclosure, ensure that the program planning, design, and implementation include requirements to:
- a. Eliminate or reduce, to the extent practical, potential explosive and environmental hazards remaining on or in used military munitions and associated material.
- b. Document the expected level of explosive residue and other munitions' constituents that remain on used or demilitarized military munitions (e.g., cartridge casings, discarding sabots).
- c. For MPPEH generated from munitions use, define specific demilitarization and disposal procedures that comply with applicable DoD explosives safety standards, trade security controls, and demilitarization requirements.
- d. Seek continuous improvement in technology and procedures used to identify, manage, and process MPPEH through research, development, testing, and evaluation programs.

2. MPPEH MANAGEMENT PROCEDURES. MPPEH management procedures shall:

- a. Establish a process that ensures unknown explosive hazards are not present when transferring MPPEH, MDEH, or MDAS within the Department of Defense, transferring MDEH to a qualified receiver, or releasing MDAS to the public.
- (1) Visual inspections may be used when safety can be assured, but are not always sufficient for providing assurance that MPPEH does not present an explosive hazard. Other DDESB-approved means (e.g., thermal treatment) may have to be used to ensure that a release or transfer does not present an explosive hazard to a receiver. Demilitarization procedures established by DLA, the DoD Components, or the SCMA shall address when visual inspection is appropriate and the procedures that may be used to inspect or process MPPEH. Documentation requirements for inspections or processes conducted on MPPEH shall be included in the management procedures.
- (2) For munitions debris and range-related debris, consideration shall be given to use of a closed-circuit process managed by a single entity that maintains a chain of custody from collection through release from DoD control as MDAS.
- b. Require that the explosives safety status of material to be transferred within or released from DoD control be assessed and documented as either safe or as having known or suspected explosive hazards based on one of the following two conditions:
 - (1) After a 100-percent inspection and an independent 100-percent reinspection.

- (2) After processing by a DDESB-approved means with an appropriate post-processing inspection.
- c. Ensure that MPPEH and MDEH are transferred or released only to those DoD Components and personnel or non-DoD entities or individuals that:
 - (1) Have the licenses and permits required to receive, manage, and process the materials.
- (2) Have technical expertise about the known or suspected explosive hazards associated with the MPPEH or MDEH being received.
- (3) Are qualified to receive, manage, and process MPPEH or MDEH in accordance with this Instruction and any implementing guidance.
 - (4) Have personnel who are:
- (a) Experienced in the management and processing of materials with explosive hazards equivalent to the MPPEH or MDEH being received.
- (b) Trained and experienced in the identification and safe handling of used and unused military munitions and any potential explosive hazards that may be associated with the specific MPPEH or MDEH being received.
- d. Require an explosives risk evaluation before allowing the DoD Components or non-DoD entities or individuals to receive, manage, or process MPPEH or MDEH. This explosives risk evaluation process will evaluate the adequacy of the receiver's management controls (e.g., training, oversight, record keeping) and operations (e.g., processing methods, equipment, storage facilities).
 - e. Ensure that only MDAS is released to the public.
- f. Verify that a documented evaluation indicates that the receiver of MPPEH or MDEH meets the requirements of paragraph 2.c. of this enclosure prior to the transfer within or release from DoD control of such material. Personnel who inspect, process, or document material as safe or hazardous according to paragraph 2.b. of this enclosure shall:
 - (1) Be trained in:
- (a) Recognition and safe handling of used and unused military munitions and specific types of MPPEH. When appropriate, such personnel shall be qualified according to DDESB Technical Paper 18 (Reference (o)) or trained in accordance with DoD Component policy and guidance for training and qualifying personnel who handle military munitions.
- (b) Demilitarization and trade security controls and procedures that apply to MPPEH, MDEH, and MDAS that is to be released from DoD control.

- (c) Identification, management (e.g., marking, segregating, securing), and processing (e.g., flash burning, complying with hazardous material and hazardous waste transportation regulations) requirements that apply to specific types of MPPEH or MDEH.
- (2) Demonstrate or provide proof of adequate training and experience in the recognition and safe handling of used and unused military munitions and other MPPEH and in the processing of MPPEH.
- (3) Be certified, in writing, by the DoD Component directly responsible for controlling the transfer or release of MPPEH, MDEH, or MDAS, as being technically qualified according to the standards provided in this Instruction and in DoD Component procedures for management of MPPEH to perform such functions and, in the case of contractor personnel, be certified in conformance with contract requirements.
- (4) Inspect and reinspect, or process and inspect, and document material as either MDEH or MDAS.
- g. Ensure the chain of custody remains intact through release from DoD control by ensuring that MPPEH awaiting documentation of its explosives safety status, MDEH, and MDAS are not commingled.
- h. Ensure that containers and holding areas for material being processed are secured and clearly marked as to:
 - (1) The hazards, if any, that may be present.
- (2) The inspection and reinspection (or processing and inspection) and documentation of the explosives safety status of the material present.
- i. Require explosives safety siting approval for locations (MPPEH or MDEH processing points) used for MPPEH processing operations (e.g., consolidation, inspection, sorting, storage, transfer, release) in accordance with Reference (e) and DoD Component implementing regulations.
- j. Minimize the quantity and time MPPEH is accumulated and retained at any location. (Under some circumstances the accumulation of MPPEH, including "speculative accumulation," or its movement from either an operational range or the site of use, could require its management as waste military munitions under applicable Federal or State requirements.)
- k. Ensure that chain of custody is maintained until MDEH or MDAS is released from DoD control. A legible copy of the documentation of the determination of the material's explosives safety status shall accompany the material when it is transferred out of DoD control. This documentation shall be maintained by the generating DoD Component for a period of at least 3 years thereafter or any longer period required by DoD Component regulations. MDEH and MDAS are no longer considered to be MPPEH as long as the chain of custody remains intact.
- (1) Documentation of the determination of the material's explosives safety status must state either that the material does not present an explosive hazard and is consequently safe from

an explosives safety perspective for transfer within or release from DoD control, or that it is hazardous with the known or suspected explosive hazards stated and is only transferable or releasable to a qualified receiver.

- (2) The documentation of material as safe requires two independent signatures by trained and certified personnel.
- (a) The first signatory must be technically qualified and may be either a DoD employee or a DoD contractor. This signatory must have performed or witnessed the initial 100-percent inspection or DDESB-approved processing of the material. (See paragraph 2.b. of this enclosure.)
- (b) The second signatory must be a technically qualified U.S. citizen who may be either a DoD employee or a DoD contractor. This signatory must have performed or witnessed the independent 100-percent reinspection or conducted an independent quality assurance inspection of processed material using an approved sampling method. (See paragraph 2.b. of this enclosure.)
- (c) Each signatory must ensure the chain of custody was maintained before signing the explosives safety documentation.
- (3) When a visual inspection allows the MPPEH to be documented as to the hazard it is known or suspected to present, documentation of the determination of the material's explosives safety status as MDEH only requires one signature.
- 1. Ensure that a database is maintained to record any reports of incidents when: an unauthorized transfer or release of MPPEH occurred; MDEH was transferred or released to an unqualified receiver or presented an unintentional explosive hazard to a qualified receiver; or MDAS was released that was subsequently found to contain an explosive hazard. Ensure that quarterly summaries of the transactions recorded in this database are provided to the DoD Components and the DDESB.
- 3. <u>IMPLEMENTING GUIDANCE</u>. Implementing guidance developed pursuant to paragraph 6.e. of Enclosure 2 shall:
- a. Establish a DoD Component-level single point of contact for addressing issues related to the management and processing of MPPEH transferred within the Department of Defense or released from DoD control.
- b. Provide DoD Component-level oversight of programs established to implement this Instruction.
- c. Develop procedures for management and disposition of Service-specific MPPEH based on DoD policy.
- d. Establish procedures to ensure that the integrity of processes for managing MPPEH, MDEH, and MDAS (e.g., inspection, reinspection, documentation) are maintained through

release from DoD control. If a DoD Component or one of its contractors breaks the chain of custody, all affected material must undergo one of the processes in subparagraphs 3.d.(1) and 3.d.(2) and be redocumented according to the results to reestablish its explosives safety status.

- (1) A second 100-percent inspection and a second independent 100-percent reinspection.
- (2) Reprocessing by a DDESB-approved means with appropriate post-processing reinspection.
- e. Ensure that any material transferred within or released from DoD control that presented an unintentional explosive hazard to either a qualified receiver or the public is investigated and reported.
- (1) All such releases shall be reported to the releaser's chain of command or to the contracting officer's representative.
- (2) Releases that present a condition or situation requiring immediate action to protect DoD personnel or the public and that meet the reporting criteria in DoD 5100.76-M (Reference (p)) shall be reported in accordance with Reference (p) with a copy provided to the DUSD(I&E).
- (3) Explosives incidents or accidents shall be reported in accordance with DoDI 6055.07 (Reference (q)).
- f. Ensure that commands and organizations, when possible, manage and process (e.g., sort, vent, inspect, segregate, secure) MPPEH on the operational range or at the point of use to minimize handling and transport prior to processing and to facilitate disposition. (The movement of some MPPEH from either the operational range or the site of use could require its management as waste military munitions under applicable Federal or State requirements in certain circumstances.)
- g. Ensure that commands and organizations seek to minimize transfer of explosive residue or munitions constituents from MPPEH into the environment during the management and disposition process.
- h. Ensure that commands and organizations use DDESB or equivalent DoD Component-approved procedures to vent all internal cavities of MPPEH before transfer or release as part of the disposition process. This requirement is waived when the receiver meets the requirements of paragraph 2.c. and, when applicable, paragraph 2.d. of this enclosure. When internal cavities are not vented, the qualified receiver must be notified in writing of their existence and of the potential explosive hazards.
- i. Ensure that commands and organizations that manage MPPEH recognize that much of the material considered to be MPPEH has salvage value, that this value shall be recovered to the extent required by the Department of Defense and applicable laws and regulations, and that funds realized from the sale of recyclable materials must be credited to the appropriate accounts according to section 2577 or section 4690(c) of title 10, United States Code (Reference (r)).

- j. Ensure that shipments of MDEH and MDAS over public transportation routes comply with Reference (e) and DoD guidance that implements hazardous material transportation regulations, to the extent applicable.
- k. For MPPEH transferred within or released from DoD control, ensure that the determination of whether material is hazardous waste or hazardous material, and its subsequent management, complies with all applicable Federal or State requirements.
- 4. <u>DEMILITARIZATION REQUIREMENTS</u>. Demilitarization requirements developed pursuant to paragraphs 5 and 6.i. of Enclosure 2 shall address:
 - a. Used military munitions and associated material.
 - b. Containers and packaging materials for military munitions.
- c. Equipment used to manufacture, produce, maintain, renovate, demilitarize, or dispose of military munitions.

GLOSSARY

PART I. ABBREVIATIONS AND ACRONYMS

DDESB Department of Defense Explosives Safety Board DDR&E Director, Defense Research and Engineering

DLA Defense Logistics Agency

DoDD Department of Defense Directive DoDI Department of Defense Instruction

DUSD(I&E) Deputy Under Secretary of Defense for Installations and Environment DUSD(L&MR) Deputy Under Secretary of Defense for Logistics and Material Readiness

MDAS material documented as safe

MDEH material documented as an explosive hazard

MPPEH material potentially presenting an explosive hazard

SMCA Single Manager for Conventional Munitions

USD(AT&L) Under Secretary of Defense for Acquisition, Technology, and Logistics

PART II. DEFINITIONS

Unless otherwise noted, these terms and their definitions are for the purpose of this Instruction.

explosive hazard. Defined in Reference (e).

<u>MDAS</u>. MPPEH that has been assessed and documented as not presenting an explosive hazard and for which the chain of custody has been established and maintained. This material is no longer considered to be MPPEH.

<u>MDEH</u>. (Formerly referred to as material documented as hazardous, or MDAH.) MPPEH that cannot be documented as MDAS, that has been assessed and documented as to the maximum explosive hazards the material is known or suspected to present, and for which the chain of custody has been established and maintained. This material is no longer considered to be MPPEH. (The MDEH characterization only addresses the explosives safety status of the material. See paragraph 3.k. of Enclosure 3.)

MPPEH. Material owned or controlled by the Department of Defense that, prior to determination of its explosives safety status, potentially contains explosives or munitions (e.g., munitions containers and packaging material; munitions debris remaining after munitions use, demilitarization, or disposal; and range-related debris) or potentially contains a high enough concentration of explosives that the material presents an explosive hazard (e.g., equipment, drainage systems, holding tanks, piping, or ventilation ducts that were associated with munitions

production, demilitarization, or disposal operations). Excluded from MPPEH are munitions within the DoD-established munitions management system and other items that may present explosion hazards (e.g., gasoline cans and compressed gas cylinders) that are not munitions and are not intended for use as munitions.

transferred within or released from DoD control. A receiver has acknowledged receipt of MDEH or MDAS material by signed documentation (e.g., DD Form 1348-1A, "Issue Release/Receipt Document," or an equivalent document) and has taken physical custody of the MDEH or MDAS from the Department of Defense.

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