



CHAIRMAN OF THE JOINT CHIEFS OF STAFF INSTRUCTION

J-4
DISTRIBUTION: A, B, C

CJCSI 4360.01B
31 August 2018

EXPLOSIVES SAFETY AND MUNITIONS RISK MANAGEMENT FOR JOINT OPERATIONS PLANNING, TRAINING, AND EXECUTION

Reference: See Enclosure D

1. Purpose. This instruction:

a. Establishes policies and practices for integrating explosives safety and munitions risk management (ESMRM) into the Joint Operation Planning Process (JOPP) to facilitate planning in support of the full spectrum of operations during peacetime and wartime periods, as defined in reference a.

b. Establishes procedures for identifying the potential hazards, consequences, and risks associated with Department of Defense (DoD) military munitions, and, when applicable, foreign munitions to support informed decision making.

c. Clarifies the level of U.S. leadership that will approve and accept munitions-related risk decisions when the explosives safety requirements of reference b cannot be met. Enclosure C of this instruction provides a framework for conducting Munitions Risk Management Assessments (MRMA).

d. Clarifies DoD Component roles in the coordination of munitions-related risk decisions with multinational partners when DoD military munitions are involved.

e. Clarifies the staffing and approval processes for explosives safety site plans and deviations identified in planning and execution for overseas enduring, contingency, training, and exercise locations. The framework includes the processes for:

(1) Requesting explosives safety site plan approvals at locations that meet the explosives safety requirements of reference b and can be sited per reference f.

(2) Deviating from explosives safety requirements of reference b.

(3) Submitting explosives safety site plans or requesting deviations at sea and aerial ports of embarkation/debarkation (S/APOE and S/APOD) and at en route infrastructure support facilities (DoD and non-DoD controlled) that are used to support U.S. Transportation Command (USTRANSCOM) distribution processes.

(4) Approving DoD-funded military construction within areas that cannot meet the explosives safety requirements of reference b and require a deviation or Secretarial Certification.

2. Superseded/Cancellation. CJCSI 4360.01A, “Explosives Safety and Munitions Risk Management for Joint Operations Planning, Training, and Execution,” 23 November 2014 is hereby superseded.

3. Applicability

a. This instruction applies to the Joint Staff, Military Services, Defense Agencies, Combatant Commands (CCMDs), sub-unified commands, joint task forces (JTFs), and their subordinate component commands (hereafter referred to collectively as the “DoD Components”).

b. This instruction applies to the S/APOD and S/APOE and en route infrastructure (e.g., munitions staging and storage) identified in operational plans.

c. The MRMA methodology contained in Enclosure C provides a framework on how to assess munitions-related risks when the explosives safety requirements of reference b cannot be met.

d. The Military Services will continue to use the established chains of command to submit explosives safety site plans specified in reference f to the DoD Explosives Safety Board (DDESB) for approval.

e. A Combatant Commander (CCDR), or delegated authority, risk decision is required for deviations when the explosives safety requirements of reference b cannot be met or when required for siting per reference f at overseas operating locations. The affected Service or Functional Combatant Command (FCC) will be provided MRMA or Hybrid Safety Submission (HSS) documentation and associated risk decision.

(1) Deviations accomplished for enduring locations as defined in reference i will be executed in accordance with the lead Service's process and approved by the CCDR or delegated authority.

f. Nonrecurring Event Waivers, which do not require a CCDR risk decision, will be managed in accordance with the lead Service's explosives safety requirements.

g. When outside the United States, in accordance with applicable international agreements, implement host-nation, coalition, or multinational explosives safety regulations, and apply them when they are equivalent to or more protective than U.S. regulations and the minimum explosives safety criteria of reference b.

h. When two or more DoD Components or multinational forces share the same installation, comply with explosives safety requirements established by the designated lead nation or lead Service, provided those requirements are equivalent to or more protective than U.S. regulations and meet or exceed the explosives safety requirements of reference b.

4. Executive Summary

a. The ability of the United States to project and sustain military power depends on effective joint military logistics. Logistics functions involving DoD military munitions and other explosives or munitions (e.g., foreign munitions) pose inherent risk to personnel, equipment, and effective military operations. History and experience have demonstrated that a catastrophic incident involving munitions has the potential to significantly disrupt and adversely impact military operations.

b. Explosives site approvals shall be obtained using guidance in reference b and reference f for locations where DoD military munitions are present or forecasted for future U.S. military operations. This instruction details the procedures and the process for attaining munitions-related risk decisions when the explosives safety requirements of reference b cannot be met or as required for siting per reference f. Planning for risks and potential consequences from the unintended initiation of DoD military munitions provides commanders the necessary information needed to make informed risk decisions based on ESMRM principles and contributes to mission success.

c. CCDR, command authority, "...provides full authority for a CCDR to perform those functions of command over assigned forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction over all aspects of military operations, joint training (or in the case of USSOCOM, training of assigned forces), and logistics

necessary to accomplish the missions assigned to the command” (reference a). Explosives safety is a critical function where the CCDR can influence decisions relating to identifying and reducing munitions-related risks. This instruction provides a process to incorporate ESMRM into planning, training, and operations; supports munitions risk decisions at the appropriate level within the operational chain of command; and fosters a holistic, command-wide site picture of accepted explosives safety risk.

d. Making munitions-related risk decisions requires close coordination between key stakeholders. Stakeholders include, but are not limited to, GCCs, FCCs, Military Services, and host nation organizations. GCC CCDRs are ultimately responsible for risk decisions within their assigned area of responsibility, per reference h. However, FCCs and Military Services have vital roles in the identification, analysis, and risk reduction process and should be included in the development of safety deviation packages submitted to CCDRs, or their delegated representative, for risk decisions.

e. Enclosure A specifies roles, responsibilities, and processes for integrating ESMRM into military planning, training, and operations.

f. Enclosure B outlines the process and types of site plans to be developed and submitted through Service channels to the DDESB for review and approval for locations where DoD military munitions are present or forecasted to be present and the location can be sited per reference f.

g. Enclosure C outlines a MRMA process for assessing munitions-related risks for locations that cannot meet the explosives safety requirements of reference b. DoD Components may use alternative processes (e.g., Service risk management processes) for assessing munitions-related risks. Hereafter, MRMA is used to denote the Enclosure C process or an alternative assessment process (e.g., Service risk management process) that meets the requirements of reference b throughout this instruction.

(1) MRMA support commanders in making informed operational risk decisions. The level of risk decision is dependent upon the level of risk associated with a deviation from the explosives safety requirements of reference b.

(2) The MRMA team lead will determine the risk level using the lead Service’s operational risk management requirements or MIL-STD 882.

h. The MRMA process is applicable during planning, training, and execution and requires consistent and systematic identification and communication of the risks posed, potential consequences, and recommended actions to mitigate the identified risks to the appropriate level of leadership

when the explosives safety requirements of reference b cannot be met or as required for siting per reference f.

(1) Acceptance of munitions-related risk requires CCDR approval unless the commander delegates risk decision authority in writing to a general/flag officer (GO/FO), subordinate commander, component commander, or staff directorate. At no time will risk decision authority for high/serious or greater risk be delegated below the GO/FO level.

(2) In each case, both the MRMA and the derived quantitative measures used to identify the hazard severity will be forwarded up the operational chain of command as a consolidated package.

i. Due to the austere environment inherent in the initial stages of operations at contingency operating locations, the GCC CCDR will provide specific guidance on DoD military munitions-related risk and consequence management. Procedural requirements in this instruction relating to ESMRM will be applied at contingency operating locations when the CCDR determines it appropriate, given all operational and force protection considerations.

5. Policy. This instruction requires DoD Components to integrate ESMRM in accordance with reference c into the planning, training, and execution processes. This instruction establishes and clarifies procedures for incorporating ESMRM practices into planning and specifies roles and responsibilities for GCC, FCC, subordinate unified, JTF, and Service Component commanders.

6. Definitions. See enclosed Glossary.

7. Responsibilities. See Enclosure A.

8. Summary of Changes. This revision: aligns and consolidates commander responsibilities; clarifies GCC and Service munitions risk management responsibilities; clarifies FCC responsibilities when operating within a GCC; moves multi-national operations and military construction paragraphs from Enclosure A, Section 2, Responsibilities to Enclosure A, Section 1, Background; revises terminology from Munitions Risk Assessment (MRA) to Munitions Risk Management Assessment (MRMA); strengthens linkage between MRMA and planning, training, and operations; updates MRMA Process Flow Map; eliminates MRMA sub-process maps; clarifies MRMA review timelines; and updates References and Glossary.

9. Releasability. UNRESTRICTED. This directive is approved for public release; distribution is unlimited on NIPRNET. DoD Components (including the Combatant Commands), Allied Partners, other Federal Agencies, and the public

may obtain copies of this directive through the Internet from the CJCS Directives Electronic Library at <https://www.jcs.mil/library>. Joint Staff activities may also obtain access via the SIPRNET directives Electronic Library Web site.

10. Effective Date. This INSTRUCTION is effective upon receipt.

For the Chairman of the Joint Chiefs of Staff:



GLEN D. VANHERCK
Major General, U.S. Air Force
Vice Director, Joint Staff

Enclosures:

- A – Roles and Responsibilities
- B – Explosives Safety and Munitions Risk Management Site Planning Process
- C – Explosives Safety Munitions Risk Management Munitions Risk Assessment Process
- D – References
- GL – Glossary

ENCLOSURE A

ROLES AND RESPONSIBILITIES

1. Background. This enclosure defines the roles and responsibilities for those commands, organizations, and commanders with responsibilities in the ESMRM process.

a. Purpose of ESMRM. The foundational premise of ESMRM involves up-front identification and clear communication, to the appropriate level of command, of the risks and consequences to and from DoD military munitions during all phases of military planning, training, and operations. Commanders should always seek to site munitions storage, operating, and en route infrastructure locations in accordance with the explosives safety requirements of reference b. When operations at these locations cannot meet the explosives safety requirements of reference b or a deviation is required to support siting per reference f, a CCDR risk decision is required.

b. Role of ESMRM in Military Planning, Training, and Operations

(1) Implementing effective ESMRM procedures to identify and address the potential hazards, consequences, and risks associated with DoD military munitions is a command priority.

(2) ESMRM requires advanced planning to support assessing munitions-related risks. A MRMA process should be implemented during all military planning, training, and operational cycles to support risk decision making when the operating location does not meet the explosives safety requirements of reference b or as required for siting per reference f. Specific objectives at each cycle include:

(a) All cycles:

1. Identification of all locations where munitions are, or are forecasted to be, present. This includes A/SPODs, A/SPOEs, and supporting logistics nodes.

2. Incorporation of MRMA requirements into the Integrated 12-month MRMA Schedule per Figure A-2, MRMA Integrated Schedule Development.

3. Completion of munitions risk assessment or review of existing MRMA documentation for identified locations.

4. Documentation of MRMA and associated CCDR risk decision.

(b) Additional objectives during planning:

1. Collection, review, and application of ESMRM lessons learned.

2. Incorporation of JOPP-derived MRMA documentation into operation plan (OPLAN) or concept plan (CONPLAN) Annex D, Logistics.

(c) Additional objectives during training and exercises:

1. Implementation of MRMA-specified risk reduction strategies.

2. Documentation of ESMRM lessons learned and mitigation strategies used during training and exercise evolutions.

(d) Additional objectives during operations:

1. Implementation of MRMA-specified risk reduction strategies.

2. Continuous evaluation of mission, planning factors, and operating environment that may alter MRMA variables and increase risk to and from munitions. Reassess munitions risk as warranted and inform/update leadership as applicable.

3. Documentation of ESMRM lessons learned.

4. Update of applicable OPLAN or CONPLAN.

(3) The ESMRM MRMA process overview (Figure A-1) provides a methodology for senior leaders to gain awareness of the potential consequences to the mission from DoD military munitions. A MRMA process provides the information necessary to make informed risk decisions balancing potential risks and consequences with operational requirements. Management of risks is a critical component of ESMRM, particularly when risks cannot be mitigated or eliminated.

(4) ESMRM information shall be included as part of joint/combined exercises and training. Lessons learned from exercises and training should be used to update existing munitions-risk assessments.

(5) Multinational Operations

(a) Integrate ESMRM into coalition and multinational operations when DoD military munitions are involved. For example, utilize North Atlantic

Treaty Organization (NATO) ESMRM Standardization Agreement, as implemented in Allied Logistics Publication-16, "Explosives Safety and Munitions Risk Management (ESMRM) in NATO Planning, Training, and Operations," for NATO specific planning, training, and operations.

(b) Communicate U.S. ESMRM risk decisions to coalition and multinational partners.

(c) When coalition, host nation, or multinational partners are encumbered by DoD military munitions operations that do not meet the requirements of reference b, a signed statement of risk acknowledgement by the encumbered force commander is required as part of the risk decision package.

(6) Military Construction (MILCON)

(a) In situations where MILCON appropriated funds are required and the project does not meet explosives safety requirements of, or requires a Secretarial Certification or Exemption in accordance with, reference b, the following will occur prior to construction:

1. A munitions risk assessment will be conducted to identify suitable construction alternatives, potential risks associated with project, and develop risk reduction recommendations.

2. A statement of compelling operational necessity for the project will be developed based on mission requirements and risks.

3. The CCDR, or delegated risk decision authority, will review the proposed MILCON project and supporting MRMA documentation and make the munitions-related risk decision on MILCON execution and forward deviation package to the appropriate Service for review.

4. The responsible Military Service Secretary will review the CCDR munitions risk decision and proposed MILCON project and disapprove/ approve the project in accordance with established Service processes.

(b) CCDRs and subordinate commanders are not required to obtain Secretarial Certification or Exemption, as required by reference b, for construction activities performed in support of contingency operations at contingency locations (see reference g) that violate explosives safety criteria of reference b but do not exceed the established MILCON low-cost threshold.

1. GCCs, in collaboration with Services, will publish, or integrate into existing ESMRM policy, the risk acceptance levels and approval process for construction projects falling under this criteria.

2. This criteria is not applicable to enduring locations as defined by reference i.

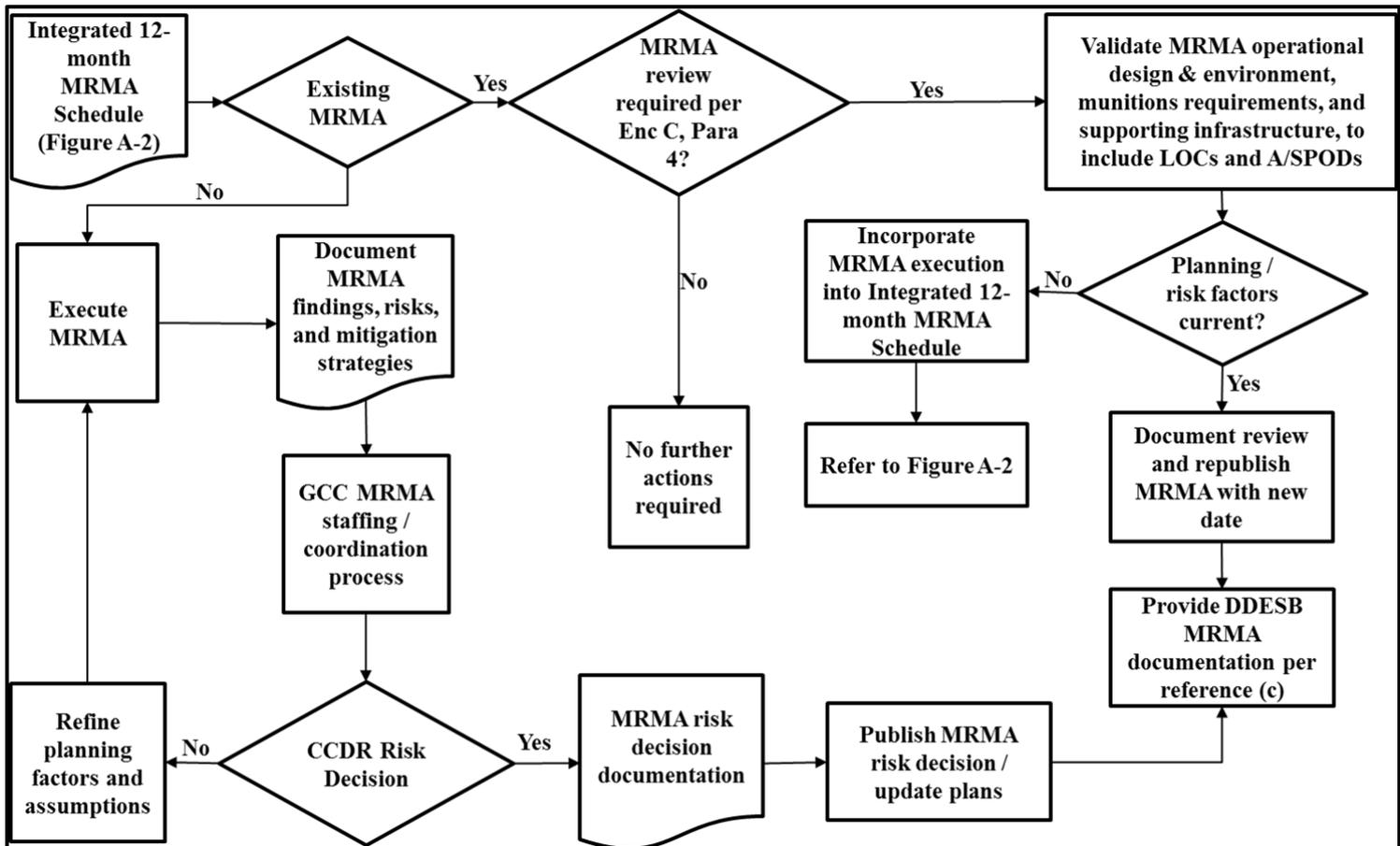


Figure A-1. ESMRM MRMA Process

2. Responsibilities. DoD Components shall implement and maintain ESMRM tenants in accordance with the following:

a. All Commanders will:

(1) Integrate ESMRM into all phases of military planning, training, and operations.

(2) Develop and maintain ESMRM Site Plans per Enclosure B for operating locations that can be sited per reference f.

(3) Execute a MRMA process for operating locations that do not meet the explosives safety requirements of reference (b) or as required to support siting per reference f.

(a) Use the lead Service's operational risk management requirements to determine the hazard severity and probability of the potential consequences unless directed otherwise by the CCDR or his/her delegated authority.

(b) Provide completed MRMA documentation to DDESB per reference c.

(4) Inform the General Counsel of the Department of Defense (DoD GC) about compliance with all international agreements in force for which the DoD GC is responsible per reference d.

(5) Establish scheduling guidelines and assign responsibilities to facilitate effective MRMA execution.

(6) Review and provide recommendations to the appropriate risk decision authority on munitions risk assessments submitted for locations within the theater of operations when the explosives safety requirements of reference b cannot be met or as required for siting per reference f.

(7) Assign risk reduction mitigating strategy responsibilities to specific organizations, as necessary.

(8) Maintain awareness of and, where appropriate, take action to eliminate or mitigate deviations from the explosives safety requirements of reference b.

(9) Implement or direct the implementation of recommendations from MRMAs, to the maximum extent possible, for all operational locations, logistics nodes, and lines of communication (LOC) to mitigate munitions risks to people, property, and the environment, while optimizing operational capabilities and readiness.

(10) Validate existing munitions-related risk decisions during the operational planning process.

(11) When delegated decision authority in writing:

(a) Review and take appropriate action on MRMAs submitted for locations within the theater of operations when the explosives safety

requirements of reference b cannot be met or as required for siting per reference f.

(b) Provide copies of risk decisions and supporting MRMA and HSSs to the appropriate GCC, its respective Service Component, and affected FCC and/or Service.

(12) Maintain or have access to all supporting MRMA documentation for their assigned area of responsibility (AOR) or functional responsibility.

(13) Ensure explosives safety lessons learned are submitted to the Joint Lessons Learned Information System per reference e.

b. Geographic CCDRs will:

(1) Publish GCC-specific supplemental ESMRM policy. Guidance will include a process for notifying host nation leadership of potential risks to host nation personnel or assets associated with DoD logistics operations involving DoD military munitions per Enclosure A, paragraphs 2.d.(1) and 2.e.(2) and the process for addressing contingency location construction per Enclosure A, paragraph 1.b.(8).(b).1.

(2) Assign Service Components to develop and submit explosives safety site plans, through the Service's administrative chain of command, to the DDESB for approval per reference f at munitions operating locations not assigned a lead Service.

(3) Provide specific guidance on risk and consequence management for DoD military munitions at contingency operating locations.

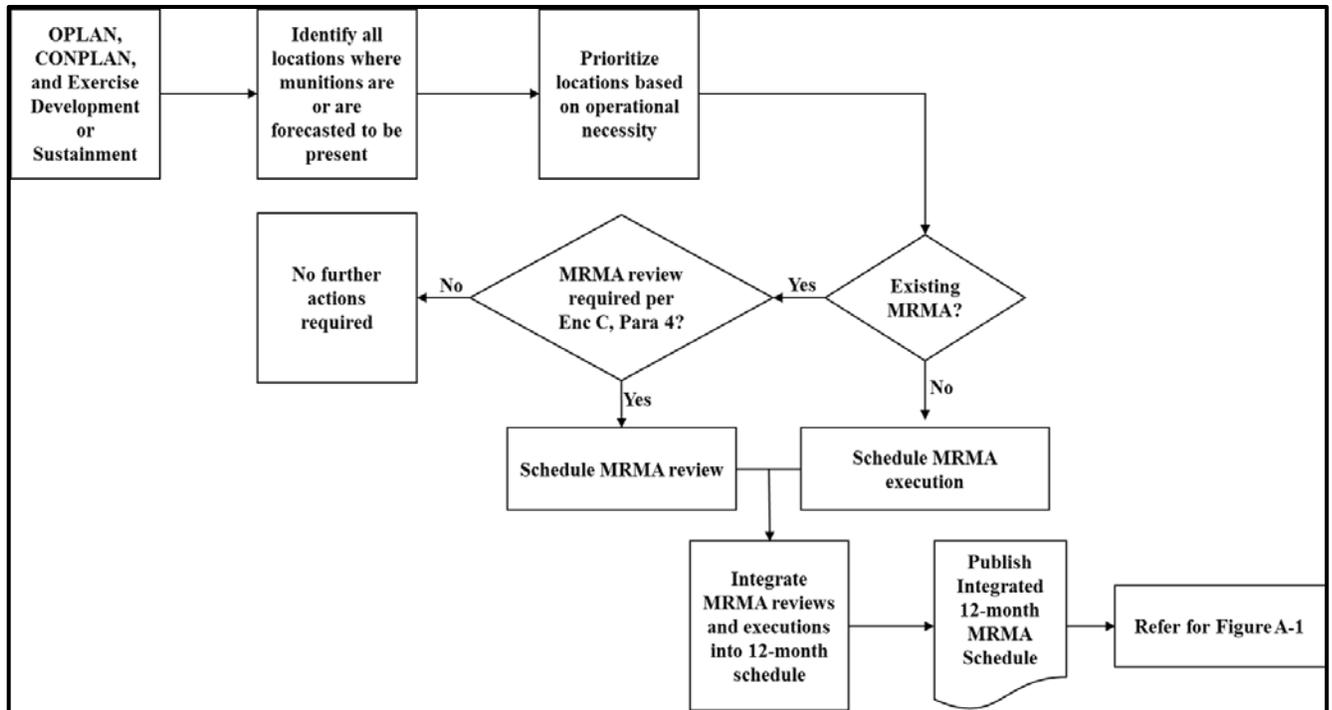
(4) Develop and maintain a prioritized list of OPLAN/CONPLAN specified operating locations, exercise and training locations, and logistics nodes where munitions are, or are forecasted to be, present within the GCC. (See Figure A-2, MRMA Integrated Scheduled Development)

(a) Develop a schedule to accomplish MRMA for each location that has not yet been assessed.

(b) Incorporate into the schedule periodic reviews of existing MRMA as specified in Enclosure C, paragraph 4.

(5) Be responsible for all munitions-related risk decisions at operating locations within AOR.

(a) CCDRs may delegate the authority to make munitions-related risk decision to GO/FOs, subordinate commanders, component commanders, or staffs. At no time will risk decision authority for high/serious or greater risk



be delegated below GO/FO level.

Figure A-2. MRMA Integrated Schedule Development

(6) Assess DoD military munitions-related risks using a MRMA process or assign subordinate commanders to conduct MRMAs at munitions operating locations not assigned a lead Service.

(7) Review all munitions-related risk decisions for all locations, logistics nodes, and LOC when the requirements of reference b cannot be met and or when required for siting per reference f.

(8) Assess munitions-related risks using a MRMA process at designated S/APODs or S/APOEs in support of GCC requirements.

(a) Provide munitions-related risk decisions and MRMAs of A/SPODs and A/SPOEs made within the GCC AOR to USTRANSCOM and the DDESB.

(b) Seek Joint Staff/J-2 assistance when strategic S/APOD and S/APOE infrastructure information is not available to support conducting MRMA execution.

(9) Task, as necessary, a Service Component or JTF with Base Operating Support-Integrator (BOS-I) responsibilities at contingency locations. Coordinate with FCCs operating in their AOR on ESMRM matters.

(10) U.S. Northern Command (USNORTHCOM) shall maintain awareness of risk decisions for all U.S. strategic locations, logistics nodes, and LOCs. Military Service Components will provide USNORTHCOM with updates to support situational awareness of all strategic locations, logistics nodes, and LOCs as required.

c. Functional CCDRs will:

(1) Comply with lead Service explosives safety requirements when operating at locations with an assigned lead Military Service.

(2) Request GCC designate a Service Component to develop and submit for approval explosives safety site plans per reference f at locations not assigned a lead Service.

(3) Request GCC assess munitions-related risks using a MRMA process when FCC mission requirements exceed the explosives safety requirements of reference b.

(4) Support requests for assistance to conduct MRMAs. Whenever possible, combine MRMA with existing assessments to minimize duplication of effort.

(5) USTRANSCOM, as the Joint Deployment and Distribution Coordinator, shall maintain or have access to a repository of ESMRM information related to individual port studies for exercise and operation planning.

d. Subordinate Unified and Joint Task Force Commanders will notify affected U.S. and host nation government officials, as directed by the GCC, of the potential risk to host nation personnel or assets associated with DoD logistics operations involving DoD military munitions. Communications with host nation government officials shall be made in coordination with the U.S. Embassy (Defense Attaché Office) or Department of State, as appropriate.

e. Service Component Commanders will:

(1) Assist designated Service base commanders and BOS-I in assessing munitions-related risks using a MRMA process when the explosives safety

requirements of reference b cannot be met or as required for siting per reference f.

(2) Notify affected U.S. and host nation government officials, as directed by the GCC, of the potential risk to host nation personnel or assets associated with DoD munitions operations. Communications with host nation government officials shall be made in coordination with the U.S. Embassy (Defense Attaché Office) or Department of State, as appropriate.

(3) Review explosives safety deviations in accordance with Service guidance and explosives safety requirements of reference b.

f. Contingency Location or Base Commander will:

(1) Communicate DoD military munitions-related infrastructure support requirements and any explosives safety concerns to the GCC or assigned lead Military Service as appropriate.

(2) Identify and resolve when possible DoD military munitions storage requirements and potential encroachment concerns during exercises and operational mission execution.

(3) Deconflict all tenant (e.g., U.S., multinational forces, coalition partners) munitions operations requirements to ensure adherence to existing approvals and conditions. If existing approvals and assessment conditions cannot be met due to operationally required changes, develop and submit for approval modified explosives safety site plans per reference f or assess the munitions-related risks using a MRMA process.

(4) Integrate approved ESMRM explosives safety site plan and risk decision conditions into base master plans and monitor compliance with those terms and conditions.

g. BOS-I will:

(1) Implement explosives safety and ESMRM tenets into master planning and real estate and infrastructure management. The BOS-I role is critical for ESMRM due to the significant consequences to and from DoD military munitions that can occur when risks are not addressed during planning or if identified risk mitigation measures are not implemented and maintained throughout mission execution.

(2) Identify DoD military munitions space requirements and potential encroachment issues during exercises and operational mission execution to the base commander for resolution.

(3) Initiate, through the base or contingency location commander, MRMA request for munitions processes, storage, and/or operations that do not meet the explosives safety requirements of reference b and or as required for siting per reference f.

h. Joint Staff will:

(1) Assist CCMDs and Military Services in resolving ESMRM issues.

(2) Ensure, as appropriate, information requirements necessary to support ESMRM for operation planning is added to the Intelligence Task List for all current OPLANs and CONPLANs.

(3) Serve as the Office of Primary Responsibility for this instruction, in coordination with the DDESB.

(4) Provide implementation training for this instruction as requested.

(5) Ensure DoD publications with explosive safety equities incorporate ESMRM requirements.

(6) Conduct ESMRM review of orders prior to approval.

i. DDESB will:

(1) Provide ESMRM support and advice, assist in munitions-related risk assessments.

(2) Provide subject matter expertise during review and validation of operational plans in coordination with the component commander's supporting Service explosives safety organization, as requested.

(3) Provide ESMRM training and/or assistance with the implementation of this instruction as requested.

(4) Maintain a repository of ESMRM and MRMA information, to include risk decisions provided by the GCCs, FCCs, and Services.

ENCLOSURE B

EXPLOSIVES SAFETY AND MUNITIONS RISK MANAGEMENT SITE PLANNING
PROCESS

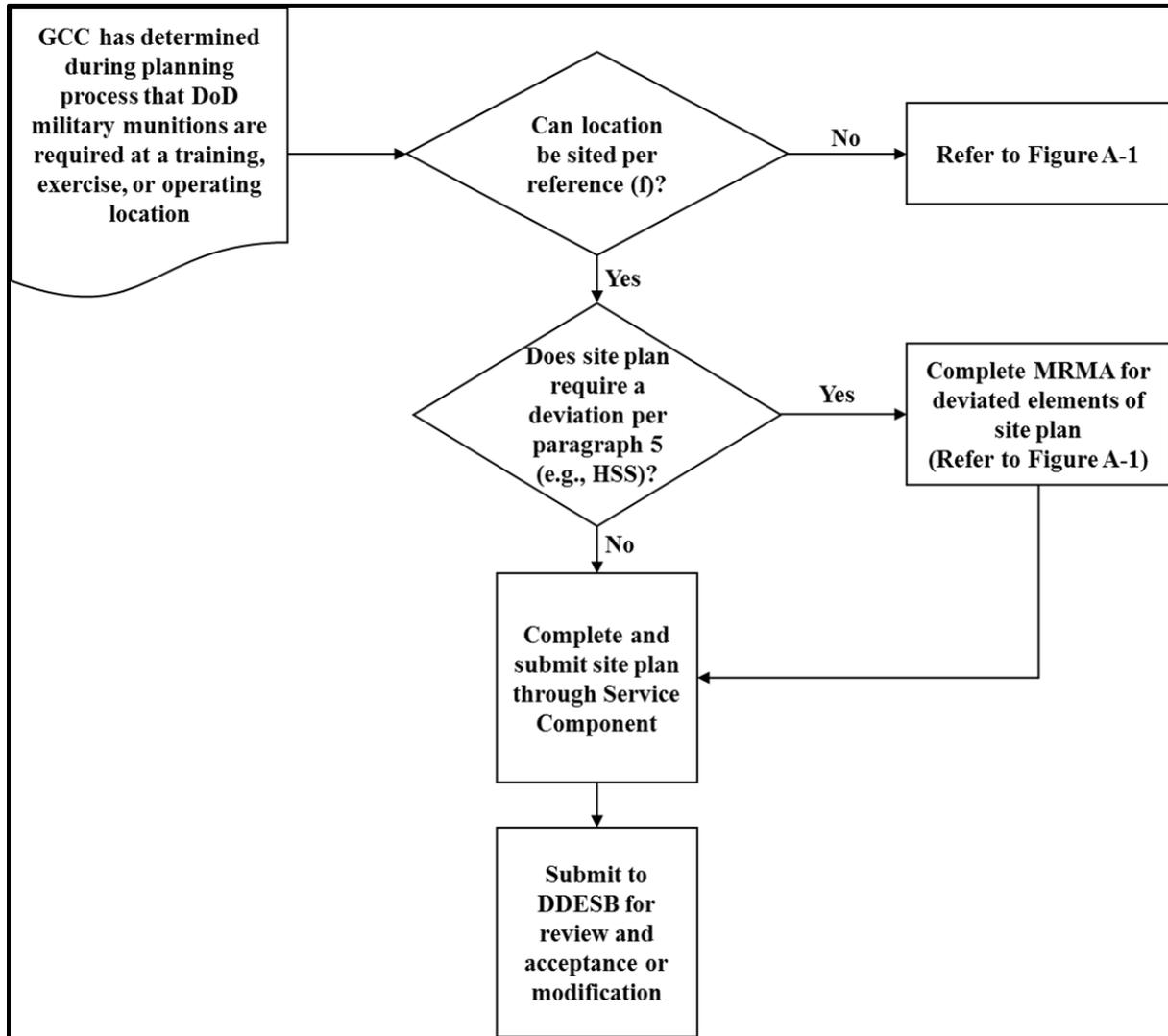


Figure B-1. Explosives Safety Site Planning Process Decision Matrix

1. Background. Requests for explosive safety site plan approval will go through the Service Component chain of command to the DDESB. Figure B-1 provides a graphic description of the process contained in this enclosure.

2. Applicability. This enclosure applies to locations that can be sited per reference f. The ESMRM explosives safety site planning process is based on explosives safety requirements of reference b. Reference b is applicable to DoD Components and DoD operations, activities, and installations worldwide and is designed to:

a. Manage the potential risks associated with DoD military munitions and other encumbering explosives or munitions (e.g., foreign military munitions).

b. Provide the minimum requirements for protection against loss of life, serious injury, and damage to property or the environment while enabling mission execution.

3. Purpose of ESMRM Explosives Safety Site Planning Process. The ESMRM explosives safety site planning process includes conducting and documenting a comprehensive assessment of existing and future potential explosion sites (PES) and existing and future exposed sites (ES).

a. PES include facilities or logistics operations involving DoD military munitions regardless of location, and non-DoD munitions when located on a DoD installation or when encumbering DoD military munitions. ES may be munitions-related, non-munitions-related, or collateral PES.

b. Effective explosives safety site planning consists of evaluating PES and ES with respect to the explosives safety requirements of reference b and DoD Component explosives safety requirements.

c. Explosive safety site plans incorporate risk management, mission criticality, operational, economic, and security considerations as well as environmental and legal criteria to meet the DoD Component's policies, goals, and mission objectives.

4. Explosives Safety Site Plans. Per reference f, explosives safety submissions must be submitted to the DDESB for final review and approval for:

a. New construction of DoD military munitions facilities.

b. New construction of non-munitions related facilities within an Explosives Safety Quantity-Distance arc.

c. DoD military munitions operating facility modifications, change of mission, or change of operations that increase the explosive hazards (e.g., personnel exposures, Net Explosive Weight, change in hazard division, nature of operation) associated with the facility.

d. Change of use of non-munitions related facilities that require application of explosives safety criteria.

e. In addition to reference f, submit explosives safety submissions for stability, steady state, and contingency operations, and associated training

locations that are determined to be semi-permanent contingency locations per reference g if they can be sited per reference f.

5. Deviations. A MRMA will be accomplished when strategic or compelling operational requirements necessitate deviation from currently established site plans that meet the explosives safety requirements of reference b or as required for siting per reference f. CCDR, or delegated risk decision authority, will accept the risk in accordance with paragraph 3.e. of this instruction.

INTENTIONALLY BLANK

ENCLOSURE C

EXPLOSIVES SAFETY AND MUNITIONS RISK MANAGEMENT ASSESSMENT
PROCESS

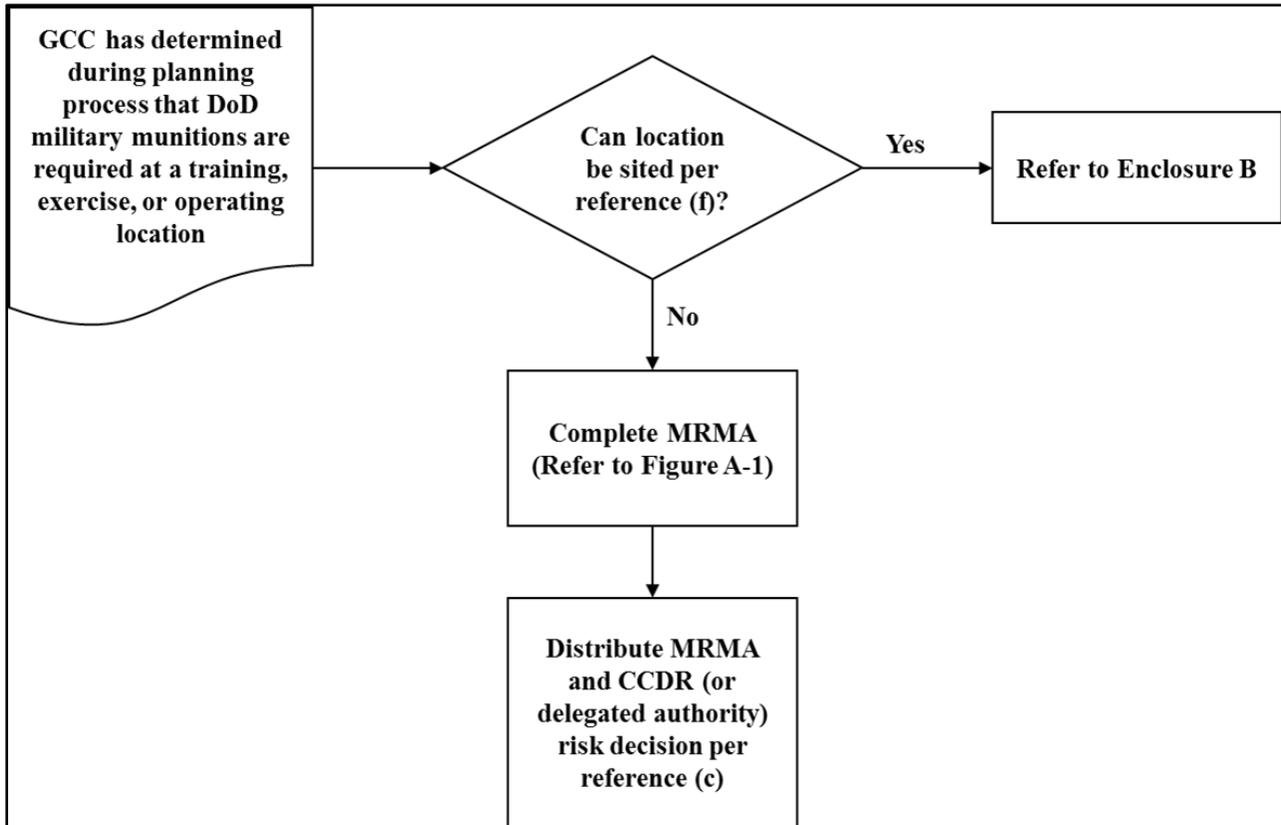


Figure C-1. Site Planning/MRMA Process Decision Matrix

1. Background. There are a number of locations where DoD military munitions are handled, assembled, tested, staged, and stored that cannot meet the requirements of reference b. Figure C-1 provides a graphic illustration of a decision process for CCDR's and their delegates' use for addressing those situations and determine if an explosive safety site plan or MRMA is required.

a. MRMA's will inform leaders of the risk associated with DoD military munitions based on the potential consequence associated with an explosives incident. Service-unique risk management processes can be used to quantify hazard severity and mishap probability in order to determine the decision level that can approve a deviation from the explosives safety requirements of reference b.

b. MRMAs will analyze the potential consequences of a DoD military munitions-related incident at an operating location, to include an estimate of:

(1) Number of personnel exposed, potential fatalities, and potential injuries.

(2) Combat assets and infrastructure exposed.

(3) Operational impact and cost of lost combat assets and potential infrastructure damage.

c. MRMAs will analyze risks to and from DoD military munitions-related operations. Site-specific risk reduction recommendations to mitigate identified risks will be included in the analysis.

d. The CCDR is responsible for MRMA risk decisions made within his/her respective AOR. MRMA decision authority may be delegated no lower than the prescribed levels prescribed in the MRMA methodology used (i.e., Service-specific risk management policy or MIL-STD-882D). At no time will risk decision authority be delegated below GO/FO level for risk determined to be high/serious or greater.

e. In each case, the MRMA and the derived qualitative measure used to identify the hazard severity will be forwarded up the chain of command as a single package to ensure that potential consequences and mitigating strategies are effectively communicated throughout the chain of command.

2. Applicability. This enclosure applies to locations that cannot be sited per reference f.

3. Purpose. The purpose of this enclosure is to:

a. Establish a MRMA framework standardizing a repeatable process for assessing DoD military munitions-related risks. The primary focus of a MRMA is to identify risks and consequences to and from DoD military munitions and munitions-related activities when deviating from reference b.

b. Identify risks and consequences to and from DoD military munitions at locations where munitions are present, or are forecasted to be, to the appropriate level of command for munitions-related risk decisions.

4. Assessment Maintenance and Update Frequency. Strategic, operational, and tactical environments are dynamic and fluid. MRMAs should be maintained and updated to reflect changes in the operating environment and mission scope. Munitions-related risks will be re-evaluated as specified below.

a. MRMAs accomplished to support explosives safety deviations as defined in reference b will be updated per the timelines specified in reference b.

b. MRMAs supporting strategic, enduring, contingency, or exercise locations not under DoD control (e.g., commercial seaports and airfields) require validation every 24 months.

c. MRMAs accomplished in support of strategic, enduring, contingency, and exercise locations under DoD control (e.g., military seaports and airfields) require validation every 24 months when the deviation is a waiver required to support either temporary operational requirements or the completion of corrective actions to eliminate a deviation.

d. MRMAs are subject to review or updating when:

(1) GCC has undergone a change of command. CDRR will be informed of approved MRMAs effecting the GCC upon assuming command.

(2) FCC has undergone a change of command. CDRR will be informed of approved MRMAs effecting USTRANSCOM distribution network.

(3) Changes have occurred to OPLANs or CONPLANs that impact conditions considered in the MRMA.

(4) The risk associated with DoD military munitions at a specific location, or that was considered in the MRMA, that affects personnel, equipment, or infrastructure (e.g., hazard class, Net Explosive Weight) has changed.

e. GCCs, FCCs, and Services may elect to require more frequent MRMA re-evaluations based on administrative or operational considerations.

5. Process. Figure C-2 illustrates nine discrete steps in a MRMA.

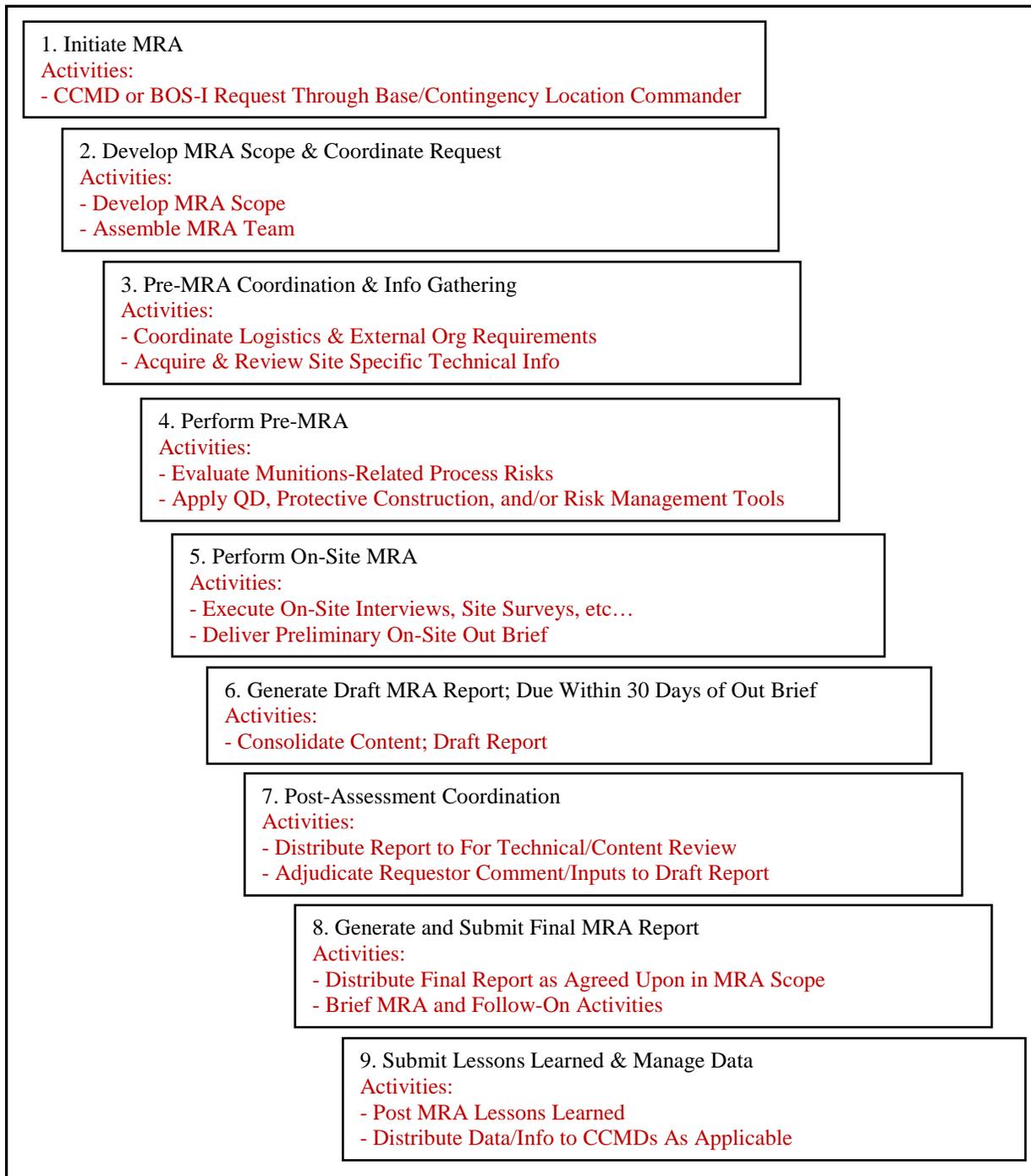


Figure C-2. MRMA Process Flow

6. Methodology. The MRMA process is based on a variety of tools that includes Quantity-Distance (QD) and risk-based tools, observations, interviews, information gathered before and during the assessment, and analysis and use

of applicable DoD and DoD Component issuances. The methodologies used in each MRMA will be identified in both the draft and final assessment reports.

7. MRMA Process Steps

a. Step 1: Initiate MRMA. CCMDs or BOS-I, through the base or contingency location commander, will initiate a request for a MRMA of a location through the Service component. GCCs, FCCs, Component Commanders, or subordinate commanders can initiate requests for MRMAs at non-DoD controlled facilities or locations not assigned a lead Service. BOS-I can conduct MRMA organically (i.e., solely within installation resources) in accordance with paragraph 1 of this Enclosure. MRMAs accomplished in this manner may tailor the MRMA process to meet assessment objectives. Completed MRMA must be distributed to the GCC and affected FCC and/or Service.

b. Step 2: Develop MRMA Scope and Coordinate with Requestor

(1) Content. MRMA scope will include, at a minimum:

(a) Scope and content agreement and signature page with both the requestor and assessment team lead signatures to ensure process and output expectations are understood.

(b) Assessment location and associated LOC.

(c) Assessment approach and methodology.

(d) Assessment team composition.

(e) Timelines (assessment and deliverables).

(f) Deliverables and their distribution (report and briefs).

(g) Any required follow-on actions.

(2) Modifications. MRMA scope may require modification to assess and develop a comprehensive final report.

(a) Modifications to the scope will be documented for complete understanding and become part of the report.

(b) The requestor and assessment team lead shall agree to each modification; either party can initiate a modification.

(c) Final modifications and Service Component Letters of Risk Acknowledgement will be forwarded to the GCC.

(3) Assessment Team Composition. The assessment team lead will assemble a team based on the type of assessment requested, scope, and the location. Team members may include representatives from:

- (a) DDESB.
- (b) Service Explosives Safety Center.
- (c) Surface Deployment and Distribution Command (SDDC).
- (d) Supporting engineering command (e.g., Naval Facilities Engineering Command (NAVFAC), throughput assessors and engineers, Army Corps of Engineers (COE)).
- (e) Service expeditionary support team.
- (f) U.S. Defense Attaché Office.
- (g) Air Mobility Command.
- (h) Military Sealift Command.
- (i) Requesting Service Component.
- (j) GCC Joint Munitions Officer or designated representative.
- (k) Installation Support Organizations (e.g., Explosives Safety Specialist, Occupational Safety, Logistics Management Specialist, Planning Elements Quality Assurance Specialist - Ammunition Surveillance, etc).

c. Step 3: Pre-MRMA Coordination and Information Gathering. Acquire relevant MRMA information and make advance arrangements for effective assessment execution, including logistics requirements. Activities include:

- (1) Pre-site survey travel to the assessment location.
- (2) Acquisition and review of site-specific technical information. Site-specific technical information may include:
 - (a) Existing site plans.

- (b) Existing deviations, prior MRMAs, and munitions-related risk decision documents.
 - (c) Operations plan details and supporting information.
 - (d) Concept of operations for exercise or other military operations.
 - (e) Maps and overhead imagery.
 - (f) Supporting infrastructure relating to DoD military munitions and munitions processes.
 - (g) Status of forces agreements.
 - (h) International agreements.
 - (i) Host nation munitions and munitions process information.
 - (j) Local host nation logistic node laws and regulations.
 - (k) Allied Ammunition Storage and Transport Publication.
 - (l) Host nation explosives safety laws, limitations, and regulations.
 - (m) Exposures (e.g., population density, vehicles, infrastructure).
 - (n) Coordination with external organizations.
- (3) Validation of MRMA logistics support requirements, to include:
- (a) Medical (e.g., vaccinations, certificates).
 - (b) Country clearance.
 - (c) Personal protective equipment.
 - (d) Transportation and billeting.
 - (e) Advance notifications to affected parties/organizations.
 - (f) Applicable restrictions and limiting factors.
 - (g) Host nation and local requirements.
 - (h) Political conditions (country brief).

(i) Training (e.g., antiterrorism/force protection and combatant command-specific).

(j) Equipment critical to mission success (e.g., Global Positioning System, camera, laptop computer, range finder, communications equipment).

(k) Personal security clearance (Joint Personnel Adjudication System) information as required.

(l) Passport.

(m) Government Travel Card.

(n) Host Nations Site Access Approval.

(4) Coordination with external organizations (as required):

(a) CCMD.

(b) Service Components.

(c) FCC (to include appropriate components).

(d) Joint Staff J-2/-3/-4/-5/-7.

(e) DDESB.

(f) Service Explosives Safety Centers (i.e., U.S. Army Technical Center for Explosives Safety, Naval Ordnance Safety and Security Activity, Air Force Safety Center, Marine Corps Systems Command).

(g) Supporting engineering activity (e.g., NAVFAC, COE, SDDC).

(h) Department of State.

(i) Military attaché.

(j) Defense Intelligence Agency.

(k) National Geospatial-Intelligence Agency.

(l) Service Component expeditionary support team.

(m) Host nation support.

d. Step 4: Perform Pre-MRMA. Accomplish initial analysis of data and materials compiled in Step 3. Assess DoD military munitions and munitions-related process risks in the context of operations to be executed at MRMA site. Identify information gaps that require resolution during on-site assessment.

e. Step 5: Perform On-Site Assessment (as required). MRMA team assesses all phases of DoD military munitions operations as a single system with respect to the mission, vulnerabilities, and hazards to and from munitions operations.

(1) Assess scoped locations, LOC, and supporting infrastructure to identify the consequences and risks to and from DoD military munitions and munitions-related processes, assigned missions, environment, and surrounding community. Consider the following, as applicable:

(a) Reception, staging, onward movement, and integration elements and associated support equipment requirements.

(b) Supporting LOCs.

(c) Surface transportation routes of ingress/egress (e.g., rail or road) utilized for munitions transport. Road assessment should include width assessment based on the type of vehicles used.

(d) Clear zones around unloading and loading points.

(e) Ability to access the unloading and loading points.

(f) Containerized munitions on/off-load support equipment (e.g., cranes, handling equipment).

(g) Supporting munitions-enabling infrastructure (e.g., operating facilities, storage pads/facilities, in-transit holding areas).

(h) Ability to throughput multiple missions at a single location.

(i) Tactical assembly areas and large gun siting/checkout areas.

(j) Emergency response capabilities, equipment, and timelines.

(k) Location and information on potential ES, such as shopping centers, hospitals, schools, apartment complexes, and houses.

(l) Location of hazardous materials (e.g., liquefied natural gas or bulk fuels facilities).

(m) Utilities location (e.g., gas pipes, power stations, electrical lines, critical communication nodes).

(n) Commercial operations.

(o) Lightning protection systems.

(2) Assess risk in accordance with paragraph 1 of this Enclosure. Develop risk management measures that may mitigate or eliminate identified risks for MRMA risk decision authority consideration.

(3) Generate and deliver preliminary on-site out-brief to the appropriate U.S. commander. Emphasis must be placed on the preliminary nature of information pending draft report coordination and finalization.

f. Step 6: Generate Draft MRMA Report. Report will include:

(1) Executive summary. Executive Summary shall contain the recommended decision and risk-reducing actions detailed in the report.

(2) MRMA Purpose.

(3) Scope of assessment (with signatures and modifications).

(4) MRMA Methodology.

(5) Explosives safety technical information (e.g., site plans, deviations, exposures).

(6) Identification of DoD military munitions and munitions-related processes.

(7) Infrastructure analysis based on risk to and from DoD military munitions, other explosives, and munitions-related processes.

(8) Overall risks to and from DoD military munitions and munitions-related processes.

(9) Recommendations for mitigating munitions-related risks.

(10) Proposed organizations/units responsible for implementing and/or supporting risk-reduction actions and expected duration of MRMA risk decision.

g. Step 7: Post-Assessment Coordination. MRMA team lead is responsible for ensuring coordination execution and report accuracy.

(1) Coordination will be accomplished using Document Comment Resolution Matrix (Table C-1). Critical inputs require adjudication or clarification with input source.

(2) Coordination timeline and finalization of MRMA report will vary based on the number of locations and number of PES and ES relationships. MRMA report finalization generally takes up to 6 months.

Name:							Phone:	
Organization:							Phone:	
#	Staff	Type	Page	Para	Line	Comments	Rationale	Adjudication Decision
<p>Type</p> <ul style="list-style-type: none"> • Critical – Comments are such that you will recommend nonconcurrency on the final if not incorporated. You must provide convincing support for such nonconcurrency in the Rationale section. • Substantive – Comments will not necessarily justify a nonconcurrency if not incorporated. • Administrative – Comments are those that require consideration. <p>Page. Page numbers are expressed in decimal form using this format, Page I-2 = 1.02, enabling proper sorting of consolidated comments.</p> <p>Paragraph. Paragraph number that pertains to the comment expressed (e.g., 4a, 6g).</p> <p>Line. Line number on the designated page that pertains to the comment, expressed in decimal form (e.g., line 1=1, line 4-5 = 4.5, line 45-67 = 45.67).</p> <ul style="list-style-type: none"> • For figures where there is no line number, use "F" with the figure number expressed in decimal form (i.e., figure II-2 as line number F2.02). • For appendices, use the "F" and the appendix letter with the figure number (e.g., Appendix D, Figure 13 as line number FD.13; Appendix C, Annex A, Figure 7 as line number FCA.07) <p>Comment. Provide comments using line-in-line-out format. To facilitate adjudication of comments, copy and insert complete sentences into the matrix. This makes it unnecessary to refer back to the publication to understand the rationale for the change. Do not use Tools/Track Changes mode to edit the comments in the matrix. Include deleted material in the comment in the strikethrough mode. Add material in the comment with underlining. Do not combine separate comments into one long comment in the matrix, (i.e., five comments rolled up into one).</p> <p>Rationale. Provide concise, objective explanation of the rationale for the comment.</p> <p>Adjudication Decision</p> <ul style="list-style-type: none"> • A – Accept • R – Reject (Rationale required for rejection) • M – Accept with modification (Rationale required for modification) 								

Table C-1. Document Comment Resolution Matrix

h. Step 8: Generate and Submit Final MRMA Report

(1) Final Briefs. MRMA team will develop and coordinate final brief in conjunction with the developing the report. Final briefs will be provided by the

MRMA team lead and members as agreed to in paragraph 7.b.(1)(f) of this Enclosure.

(2) Final Report. MRMA team lead will provide the final report to the requestor during final brief and subsequently distribute report to DDESB and parties as agreed to in paragraph 7.b.(1)(f) of this Enclosure.

(3) Follow-On Actions. As required.

i. Step 9: Lessons Learned and Information Management

(1) MRMA team lead will capture lessons learned from assessment team and requesting organization per reference e. Inputs should focus on improving MRMA processes (e.g., coordination, scoping, logistics, data gathering, information management, etc).

(2) Requesting organization will distribute MRMA information and the risk management decisions to CCMD planners for integration into plans, training exercises, and operational documents.

ENCLOSURE D

REFERENCES

- a. "DoD Dictionary of Military and Associated Terms", as of August 2017
- b. DoD Manual (DoDM) 6055.09-M, "DoD Ammunition and Explosives Safety Standards," 4 August 2010,
- c. DoD Directive (DoDD) 6055.9E, "Explosives Safety Management," 18 November 2016
- d. DoDD 5530.3, "International Agreements," 11 June 1987
- e. CJCS Instruction (CJCSI) 3150.25 series, "Joint Lessons Learned Program," 26 June 2015
- f. DoD Instruction (DoDI) 6055.16, "Explosives Safety Management Program," 29 July 2008
- g. DoDD 3000.10, "Contingency Basing Outside the United States," 10 January 2013
- h. DoDD 5100.01, "Functions of the Department of Defense and Its Major Components," 21 December 2010
- i. DoDI 3000.12, "Management of U.S. Global Defense Posture," 6 May 2016

Other Supporting Documentation

1. Title 10, United States Code, Chapter 6, Section 164 (Commanders of Combatant Commands: assignment, powers and duties)
2. Title 10, United States Code, Chapter 7, Section 172 (Ammunition Storage Board)
3. DoDD 4270.5, "Military Construction," 12 February 2005
4. DoDD 4715.1E, "Environment, Safety, and Occupational Health (ESOH)," 19 March 2005
5. DoDD 5158.04, "United States Transportation Command (USTRANSCOM)," 27 July 2007

6. DoDM 4140.01 series, "DoD Supply Chain Materiel Management Regulation," 10 February 2014
7. DDESB Technical Paper 26, "Guidance for Explosives Safety Site Plans," 30 January 2014
8. DDESB Technical Paper 23, "Assessing Explosives Safety Risks, Deviations, and Consequences," 31 July 2009
9. CJCS Manual 3122.05 series, "Operating Procedures for Joint Operation Planning and Execution System"
10. CJCSI 3100.01 series, "Joint Strategic Planning System"
11. CJCSI 3141.01 series, "Management and Review of Joint Strategic Capabilities Plan (JSCP)-Tasked Plans"
12. CJCSI 4310.01 series, "Logistics Planning Guidance for Pre-Positioned War Reserve Materiel"
13. CJCSI 4600.02 series, "Exercise-Related Construction (ERC) Program Management"
14. JP 1, "Doctrine for the Armed Forces of the United States," 25 March 2013
15. JP 2-0, "Joint Intelligence," 22 October 2013,
16. JP 3-0, "Joint Operations," 17 January 2017
17. JP 3-10, "Joint Security Operations in Theater," 13 November 2014
18. JP 3-34, "Joint Engineer Operations," 6 January 2016
19. JP 4-0, "Joint Logistics," 16 October 2013
20. JP 4-01, "Joint Doctrine for Defense Transportation System," 18 July 2017,
21. JP 5-0, "Joint Operation Planning," 16 July 2017,
22. MIL-STD-882D, "Department Of Defense Standard Practice: System Safety," 10 February 2000
23. "Allied Ammunition Storage and Transport Publication," September 2005

GLOSSARY

PART I – ABBREVIATIONS AND ACRONYMS

Unless otherwise stated, the terms and definitions contained in this glossary are for the purposes of this instruction only.

AOR	Area of Responsibility
BOS-I	Base Operating Support-Integrator
CCDR	Combatant Commander
CCMD	Combatant Command
COB	Contingency Operating Base
COE	Corps of Engineers
CONPLAN	Concept Plan
DDESB	Department of Defense Explosives Safety Board
DISA	Defense Information System Agency
DoD	Department of Defense
DoD GC	General Council of the Department of Defense
ES	Exposed Site
ESMRM	Explosives Safety and Munitions Risk Management
FCC	Functional Combatant Command
GCC	Geographic Combatant Command
GO/FO	General Officer/Flag Officer
HSS	Hybrid Safety Submissions
JTF	Joint Task Force
LOC	Lines of Communication
MEC	Munitions and Explosives of Concern
MILCON	Military Construction
MIL STD	Military Standard
MRMA	Munitions Risk Management Assessment
MRCSS	Munitions Response Chemical Safety Submission
MRESS	Munitions Response Explosives Safety Submission
NATO	North Atlantic Treaty Organization

NAVFAC	Naval Facilities Engineering Command
OPLAN	Operational Plan
PES	Potential Explosion Site
QD	Quantity-Distance
QRA	Qualitative Risk Assessment
RBSS	Risk-Based Safety Submission
S/APOD	Sea and Aerial Ports of Debarkation
S/APOE	Sea and Aerial Ports of Embarkation
SAFER	Safety Assessment for Explosive Risk
SDDC	Surface Deployment and Distribution Command
USNORTHCOM	U.S. Northern Command
USSOCOM	U.S. Special Operations Command
USTRANSCOM	U.S. Transportation Command

PART II - DEFINITIONS

Base Operating Support-Integrator — The designated Service component or joint task force commander assigned to synchronize all sustainment functions for a contingency base. Also called BOS-I. (JP 4-0).

Combatant Command — A unified or specified command with a broad continuing mission under a single commander established and so designated by the President, through the Secretary of Defense and with the advice and assistance of the Chairman of the Joint Chiefs of Staff. (JP 1)

Combatant Commander — A commander of one of the unified or specified combatant commands established by the President. Also called CCDR. (JP 3-0)

Contingency Locations — A non-enduring location outside of the United States that supports and sustains operations during named and unnamed contingencies or other operations as directed by appropriate authority and is categorized by mission life-cycle requirements as initial, temporary, or semi-permanent. (DoDD 3000.10)

DoD Components — 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 Department of Defense agencies, Department of Defense field activities, and all other organizational entities in the Department of Defense. (JP 1)

Enduring Location — A geographic site designated by the DoD for strategic access and use to support U.S. security interests for the foreseeable future. The following types of sites are considered enduring for U.S. Government purposes: Main Operating Base; Forward Operating Site; and Cooperative Security Location. All three types of locations may be composed of more than one distinct site. (DoDI 3000.12)

Explosives Safety Munitions Risk Management — Systematic approach that integrates risk analysis into operational planning, military training exercises, and contingency operations with the goal of identifying potentially adverse consequences associated with munitions operations, risk reduction alternatives, and risk acceptance criteria for senior officials to make the risk decision. Also called ESMRM. (CJCSI 4360.01B)

Main Operating Base — An enduring Global Defense Posture location characterized by the presence of permanently assigned U.S. Forces and robust

infrastructure that typically include command and control, highly developed force protection measures, hardened facilities, and significant quality-of-life amenities, often including family support facilities.

United States — Includes the land area, internal waters, territorial sea, and airspace of the United States, including: United States territories; and (b) other areas over which the U.S. Government has complete jurisdiction and control or has exclusive authority or defense responsibility. (JP 1-02. Source: JP 1)