

Product Assurance

**Chemical
Biological
Defense
Materiel
Reliability
Program**

Headquarters
Department of the Army
Washington, DC
2 May 2016

UNCLASSIFIED

SUMMARY of CHANGE

AR 702-16

Chemical Biological Defense Materiel Reliability Program

This major revision, dated 2 May 2016--

- o Changes the title to accurately reflect AR 702-16 applicability by removing references to chemical stockpile while including biological defense materiel (cover).
- o Assigns U.S. Army Materiel Command the responsibility to establish a Chemical Biological Defense Materiel Reliability Program manager (para 1-4c(1)).
- o Adds the requirement for process improvement and requirements determination procedures (para 1-4c(2)(f)).
- o Establishes the use of the Mobility Inventory Control Accountability System role until the transition to the Single Army Logistics Enterprise (para 1-4c(3)).
- o Reflects the use of Mobility Inventory Control Accountability System-Web as the interim shelf-life management application software in accordance with AR 700-146 (para 1-4c(3)).
- o Directs the use of Logistics Modernization Program as a system of record for materiel management at the National Inventory Control Point level (para 1-4c(4)).
- o Assigns U.S. Army Materiel Command the responsibility to establish the primary inventory control activity for the sustainment phase of life cycle management of all Army-managed Chemical Biological Defense Materiel assets (para 1-4c(5)).
- o Establishes responsibilities for the Chemical Biological Defense Materiel Reliability Program manager (para 1-4c(7)).
- o Revises and clarifies the Chemical Biological Defense Materiel Reliability Program's two core elements: Chemical Biological Defense Materiel Surveillance Program and Shelf-Life Function Test Program (para 2-2).
- o Clarifies how the Chemical Biological Defense Materiel Reliability Program is funded (para 2-3).
- o Adds an internal control evaluation (app B).
- o Defines Chemical Biological Defense Materiel (glossary).

Product Assurance

Chemical Biological Defense Materiel Reliability Program

By Order of the Secretary of the Army:

MARK A. MILLEY
General, United States Army
Chief of Staff

Official:



GERALD B. O'KEEFE
Administrative Assistant to the
Secretary of the Army

History. This publication is a major revision.

Summary. This regulation establishes policy, designates responsibilities, and provides guidance for managing the Chemical Biological Defense Materiel Reliability Program.

Applicability. This regulation applies to the Active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve, unless otherwise stated.

Proponent and exception authority.

The proponent of this regulation is the Deputy Chief of Staff, G-4. The proponent has the authority to approve exceptions or waivers to this regulation that are consistent with controlling law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through higher headquarters to the policy proponent. Refer to AR 25–30 for specific guidance.

Army internal control process. This regulation contains internal control provisions in accordance with AR 11–2 and identifies key internal controls that must be evaluated (see appendix B).

Supplementation.

Supplementation of this regulation and establishment of command and local forms is prohibited without prior approval from the Deputy Chief of Staff, G-4 (DALO–MNI), 500 Army Pentagon, Washington, DC 20310-0500.

Suggested improvements.

Suggested Improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the Deputy Chief of Staff, G-4 (DALO–MNI), 500 Army Pentagon, Washington, DC 20310-0500.

Distribution.

Distribution. This publication is available in electronic media only and is intended for command levels C, D, and E for the Active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

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Glossary

Chapter 1 Introduction

1–1. Purpose

This regulation establishes Army policy, responsibilities, and guidance for the Chemical Biological Defense Materiel Reliability Program (CBDMRP). Any equipment used by Soldiers or personnel while performing their duties in a chemical or biological hazardous or contaminated area falls under the provision of the CBDMRP. This includes chemical and biological agent detectors, individual chemical biological protective equipment, collective protective equipment, and decontamination equipment.

1–2. References

See appendix A.

1–3. Explanation of abbreviations and terms

See the glossary.

1–4. Responsibilities

a. Principal Officials of Headquarters, Department of the Army and Office of the Director of Army Safety will provide management and staff supervision within their respective functional areas in support of the CBDMRP.

b. The Deputy Chief of Staff, G–4 will—

(1) Serve as the principal staff element for developing and disseminating policy for the CBDMRP.

(2) Implement safety and health program requirements, risk assessments, and hazard controls applicable to chemical biological defense materiel (CBDM), as prescribed by the Office of the Director of Army Safety and the Surgeon General, respectively.

(3) Review, program, and approve funds for the conduct of the CBDMRP and include these requirements in the Army Materiel Plan.

c. The Commanding General, U.S. Army Materiel Command will—

(1) Provide command oversight, direction, guidance, and assistance as necessary to ensure compliance with the provisions of this regulation.

(2) Establish procedures to—

(*a*) Implement the CBDMRP, including training courses, testing procedures, reports dissemination, and corrective actions to deficiencies in the CBDM stock.

(*b*) Determine if there is a need to extend the shelf-life of a CBDM item.

(*c*) Determine if CBDM is meeting established serviceability requirements.

(*d*) Implement, in coordination, with those Department of Defense activities that have CBDM.

(*e*) Use surveillance review and testing procedures for those activities that require such.

(*f*) Improve the CBDMRP process and requirements determination procedures to ensure visibility, Accountability and physical security risks reduction for CBDM inventories in compliance with AR 710–1 and AR 740–26.

(3) Use Mobility Inventory Control Accountability System-Web as the interim software application for providing asset visibility and managing shelf-life data until the full deployment of the Single Army Logistics Enterprise to include Logistics Modernization Plan and Global Combat Support System-Army, in accordance with AR 700–146.

(4) Use the Logistics Modernization Plan at the national inventory control point level as the system of record for materiel management providing asset visibility and shelf-life management until full deployment of the Single Army Logistics Enterprise (see para 1–4*c*(3)).

(5) Assign the responsible primary inventory control activity for the sustainment phase of life cycle management of all Army-managed CBDM assets.

(6) Ensure—

(*a*) CBDM meets established safety and reliability requirements.

(*b*) CBDM is managed, maintained, and updated per the Shelf-life Function Test Program (SFTP), as outlined in paragraph 2–2*b*.

(*c*) CBDM data (for example, serviceability, condition, shelf-life extension, and disposition) for Army-managed CBDM is documented and available in Mobility Inventory Control Accountability System, to help ensuring product assurance standards and quality compliance.

(*d*) CBDM items are entered into the CBDMRP, maintained, and retrograded or disposed of per this regulation and applicable policies, directives, or program scheduling.

(*e*) Laboratory testing is performed by Engineering Support Activity (ESA) certified laboratory facilities and is conducted in accordance with this regulation, applicable supply bulletins (SBs) or ESA-approved testing operating procedures.

(*f*) Activities that manage CBDM comply with material management policies.

- (7) Assign a CBDMRP manager who will—
- (a) Develop and submit funding requirements into the program objective memorandum, Army working capital fund (AWCF) or operation and maintenance, Army (OMA) program funds for the management of the Army CBDMRP.
 - (b) Coordinate with the responsible ESA to obtain technical and engineering support including but not limited to: certification of test facilities; compliance with surveillance testing standards in accordance with this regulation and current technical requirements; and technical evaluation and assessment of surveillance test results, as necessary.
 - (c) Conduct annual inspections of facilities storing CBDM to ensure CBDM is being properly managed to meet condition and reliability standards as outlined in applicable storage directives. When deficiencies are identified, provide appropriate assistance to restore the CBDM to satisfactory condition.
 - (d) Coordinate inspections with and use ESA technical experts, as required, to ensure storage practices comply with this regulation and current technical requirements.
 - (e) Provide required assistance, when deficiencies are identified, to restore CBDM to satisfactory condition.
 - (f) Conduct follow-up inspections as necessary to verify compliance with this regulation and applicable storage standards.
 - (g) Review the results of all Chemical Biological Defense Materiel Surveillance Program (CBDMSP) audits, identify program deficiencies, provide guidance and perform follow-up evaluations to ensure compliance to program directive and stock readiness objective in AR 740–3.

Chapter 2

Chemical Biological Defense Materiel Reliability Program Objectives, Elements, and Funding

2–1. Objectives

CBDMRP will—

- a. Comply with applicable reliability or product assurance standards and regulations.
- b. Provide annual status updates on the condition of CBDM in storage.
- c. Provide timely and accurate data for acquisition and logistics planning.
- d. Identify CBDM or care of supplies in storage (COSIS), scheduled maintenance, testing, retrograde, or disposal.
- e. Assign priority-of-issue for CBDM or restrict the use of CBDM with marginal reliability or performance.
- f. Establish, confirm, define, and evaluate the SFTP to ensure its compliance with written policy.
- g. Investigate and establish the root cause of CBDM deficiencies or materiel degradation.
- h. Take those corrective actions necessary to maintain CBDM stocks at a satisfactory condition.
- i. Provide a basis for evaluation of the shelf-life of CBDM.

2–2. Elements

The CBDMRP consists of two core elements: CBDMSP and CBDM SFTP.

- a. The CBDMSP—
 - (1) The CBDMSP ensures suitable storage facilities and equipment are available, maintained, and meet all applicable Occupational Safety and Health Administration, safety and reliability standards.
 - (2) The CBDMSP also provides guidance to facilities storing CBDM and taking corrective actions, as required to maintain CBDM stocks in satisfactory conditions.
 - (3) The CBDMSP conducts annual inspections of CBDM storage facilities to ensure proper management. The process includes documenting deficiencies and developing corrective actions plans. Provide guidance to ensure compliance with this regulations and stock readiness objectives stated in AR 740–3. These inspections will be performed by trained CBDM inspectors under the oversight of a quality assurance specialist assigned to storage, issue, or test activities to ensure—
 - (a) Ensure all CBDM is packaged and labeled in accordance with military standard (MIL–STD) 129R and MIL–STD 130N and that all CBDM meets materiel serviceability and shelf-life requirements including proper storage, and maintenance of materiel in ready-for-issue condition in accordance with Department of Defense Manual (DOD) 4140.27M and Defense Logistics Agency Regulation (DLAR) 4155.37.
 - (b) All Army activities that have a receipt, storage, issue, maintenance, surveillance, or test mission for CBDM will be inspected annually. Inspections will include but are not limited to the following:
 - 1. Accurate accountability of all CBDM in storage, and changes in materiel serviceability or condition are promptly recorded.
 - 2. Ensure CBDM assets that are suspended or pending disposition are properly segregated from serviceable stocks, properly labeled to reflect the materials conditions, identify, and status. Prompt processing of materiel deficiency report or supply deficiency report, and primary inventory control activity requested materiel disposition.
 - 3. Cyclic inspections and COSIS will identify deficiencies that prevent deteriorations of CBDM in storage.

4. Identify CBDM subjected to unsatisfactory or abnormal conditions for potential shelf-life-testing.
5. Ensure only ESA-certified test facilities are used for testing of CBDM having SFTP requirements.
6. Perform follow-up inspections to ensure corrective actions plan resolution(s) is compliant in all areas.
7. When the CBDMRP manager receives shelf-life test results, they will notify the national inventory control point to update the data to reflect the items new status.

b. CBDM SFTP—

(1) The CBDMRP manager administers the SFTP. Its purpose is to determine the functional reliability and confirm shelf or service life of CBDM. Function testing evaluates design characteristics of critical deteriorative components of CBDM to detect trends in materiel degradation and assesses the life cycle performance of CBDM items requiring special facilities and equipment for testing.

(2) The SFTP consists of the following subprograms:

(a) Functional tests requiring laboratory analysis. ESA-certified laboratories perform these tests to provide data for use in extending the shelf-life of a CBDM item, removing an item from the inventory, or identifying critical design or material failures. Laboratory testing includes both chemical agent and nonchemical function testing. Each test is performed for a particular CBDM production lot and the test result is applied to the entire lot, with test result applied to the entire regardless of ownership and location.

(b) Function tests at Chemical Biological Defense Materiel facilities, installations, and/or proving grounds. This testing program pertains to major end and secondary items and systems stored at the installation that do not require laboratory testing, the extensive use of instruments, or range facilities for evaluation. Specially trained CBDM inspection personnel instructions are directed by the CBDMRP manager.

(c) Function tests at Chemical Biological Defense Materiel storage activities. This testing program, which pertains to the maintenance of CBDM in storage ensuring COSIS inspections are conducted and that serviceable items are maintained in ready-for-issue condition. This program includes the classification of CBDM stock into representative segments (for example, by production lots, period of production, manufacturer, storage areas, and climatic conditions). Samples from these segments are then selected, inspected or tested, and evaluated for reliability, performance, and serviceability of the CBDM, as directed by the CBDMRP manager.

(d) Function tests at training facilities. This testing program includes both annual and semi-annual Service training operations with CBDM conducted by military units. Data derived from this testing is used to supplement materiel performance and reliability data obtained from laboratories, activities, and installations of the SFTP.

2–3. Funding for the Chemical Biological Defense Materiel Reliability Program

The CBDMRP utilizes appropriated Army funds for CBDM in compliance with DOD 7000.14–R and authorizing statute. No guidance outlined in this paragraph should be interpreted to limit, expand or otherwise depart from applicable statutory or DOD regulatory authorities.

a. Funding for the Chemical Biological Defense Materiel Surveillance Program. This program is performed as part of the normal storage functions that CBDM storage installations carry out during the execution of their wholesale supply mission. The wholesale supply mission includes inspections and tests to validate the supply readiness of CBDM and components: preservation, packaging, and packing performed during receipt, storage, issue, and shipment. Included are cyclic inspections (such as, inspections performed at regular intervals) to verify the serviceability and or shelf-life of CBDM items and components in the wholesale inventory. The CBDMSP also applies to Army War Reserve stock.

(1) Army organizations that own CBDM stored at non-Army storage installations normally provide the storing installations OMA funds to perform required surveillance functions for Army-owned CBDM.

(2) OMA, or AWCF funds through a Life Cycle Management Command (LCMC), normally fund performance of both verification inspections and test that are performed as part of depot-level maintenance activities.

b. Funding for Shelf-life Function Test Program. The function test program includes material, physical and chemical property testing, agent testing, and other testing performed by laboratories and CBDM storage installations to verify, extend or not to extend the shelf-life for all CBDM items. The responsible LCMC will normally use AWCF or OMA funds to finance the CBDM laboratory testing programs and noncyclical function tests.

(1) The Army's CBDM storage depots normally receive OMA funds through the LCMC to perform SFTP actions for all Army-owned CBDM.

(2) The responsible LCMC will normally obtain funding from non-Army sources for shelf-life testing of CBDM that is not part of the Army inventory. The Army will review and evaluate request for testing of Army-managed CBDM received from non-Army organizations and approval or disapproval requests, as applicable.

(3) For sales under the Foreign Military Sales (FMS) Program and/or the CBDMRP will identify funding from the FMS Program and/or other governmental agencies for shelf-life testing, as applicable.

(4) The responsible program manager or item developer will use research, development, test, and evaluation funds to finance all required shelf-life activities (for example, developing initial shelf-life specifications, identification of shelf-life limiting components, developing initial shelf-life criteria and test and/or inspection protocols, and developing specialized shelf-life test equipment) prior to fielding of the item. Shelf-life activities will be reviewed as part of the criteria for program milestone decisions prior to commencement of initial CBDM production.

Appendix A References

Section I Required Publications

This section contains no entries.

Section II Related Publications

A related publication is a source of additional information. The user does not have to read it to understand this publication. SBs are available at <http://www.logsa.army.mil/>.

AR 11–2
Managers Internal Control Evaluation Certification

AR 25–30
Army Publishing Program

AR 385–10
The Army Safety Program

AR 700–146
Individual Chemical Equipment Management Program

AR 702–7/{DLAR 4155.24; SECNAVINST 4855.5A; AFR 74–6}
Product Quality Deficiency Report Program

AR 702–7–1
Reporting of Product Quality Deficiencies within the U.S. Army

AR 702–11
Army Quality Program

AR 702–17/AFR 74–18/SECNAVINST 4855.8/DLAR 8200.11
Quality Improvement and Product Nonconformance Reduction

AR 710–1
Centralized Inventory Management of the Army Supply System

AR 740–1
Storage and Supply Activity Operations

AR 740–3/{DLAI 4145.4; AFMAN 23–125(IP); NAVSUPINST 4400.100A; MCO 4450.15A}
Stock Readiness

AR 740–26
Physical Inventory Control

DLAR 4155.37
Materiel Quality Control Storage Standards Regulation

DOD 4140.27–M
DOD Shelf-Life Management Program

DOD 7000.14–R
Department of Defense Financial Management Regulations (FMRS)

DOD Shelf Life Materiel Quality Control Storage Standards
(Available at <http://www.dla.mil/HQ/StrategicPlansandPolicy/Offers/Products/PolicyAndProcedures.aspx>)

DODM 4140.01 – V5

DOD Supply Chain Material Management Procedures: Delivery of Materiel

MIL–STD 129R

Military Standard Marking for Shipment and Storage (Available at <http://quicksearch.dla.mil/>.)

MIL–STD 130N

Identification marking of U.S. Military Property (Available at <http://quicksearch.dla.mil/>.)

SB 740–94–1

Storage Serviceability Standards for TACOM Materiel Sets and Kits, Detectors and Alarms, CBR and Ancillary Items

SB 740–94–2

Storage Serviceability Standards for SBCCOM Materiel: Decontaminating Equipment and Decontaminating Equipment and Decontaminating Agents

SB 740–94–4

Department of the Army Supply Bulletin Storage Serviceability Standards for TACOM Materiel Collective Protection Equipment, Chemical-Biological and Ancillary Items

SB 740–94–5

Storage Serviceability Standards for Masks, Chemical-Biological (All Types), and Ancillary Items

SB 740–94–6

Storage Serviceability Standards for SBCCOM Materiel Filter Units, Gas Particulate, and Ancillary Items

SB 740–94–7

Storage Serviceability Standards for TACOM Materiel Breathing Apparatus, Self-Contained Protective Outfits, and Ancillary Items

SB 740–94–8

Storage Serviceability Standards for TACOM Materiel Riot Control Agency Dispersers, and Ancillary Items

SB 740–94–9

Storage Serviceability Standards for SBCCOM Materiel: Smoke Generators and Ancillary Items

TM 38–410

Storage and Handling of Hazardous Materials

Section III**Prescribed Forms**

This section contains no entries.

Section IV**Referenced Forms**

Unless otherwise indicated, DA Forms are available on the Army Publishing Directorate Web site (<http://www.apd.army.mil>)

DA Form 11–2

Internal Control Evaluation Certification

DA Form 2028

Recommended Changes to Publications and Blank Forms

Appendix B Internal Control Evaluation

B-1. Function

The function covered by this evaluation is the management of the Army's CBDMRP.

B-2. Purpose

The purpose of this evaluation is to assist CBDMRP managers in evaluating the key internal controls listed. It is intended as a guide and does not cover all controls.

B-3. Instructions

Answers will be based on the actual testing of key internal controls (for example, document analysis, direct observation, interviewing, sampling, simulation, or other). Answers that indicate deficiencies will be explained, and the corrective action identified in supporting documentation. These key internal controls must be evaluated at least once every 5 years. Certification that this evaluation has been conducted. Must be accomplished on a DA Form 11-2 (Internal Control Evaluation Certification).

B-4. Test questions

- a.* Does CBDM entering into or already in the storage meet established safety and reliability requirements?
- b.* Do the conditions and reliability trends of CBDM provide an estimate of the current storage condition?
- c.* Are CBDM items maintained, retrograded, or disposed of in a timely manner?
- d.* Is priority-of-issue assigned, in accordance with deployment and/or fielding requirements?
- e.* Are CBDM items designated with marginal reliability or performance restricted for use?
- f.* Is shelf-life established, confirmed or when warranted, extended?
- g.* Is the cause of CBDM deficiencies found by CBDMRP investigated?
- h.* When unsatisfactory conditions exist, is the basis for the engineering and logistic corrective actions necessary to restore the CBDM to a satisfactory condition established?
- i.* Is there a basis for a formal evaluation of equipment systems' life expectancies that might need to be adjusted?
- j.* Is lab or testing facility and test equipment certified by the appropriate certification program or to the standard for required level of CBDM function testing being performed?
- k.* Is shelf-life information on CBDM stocks maintained, updated, and accessible to CBDM users?
- l.* Are required resources available to manage and provide for testing of CBDM?
- m.* Does quality deficiency reporting, corrective action requests and/or responses, including follow-up and closure reports, meet the intent of the referenced Army assurance requirements?

B-5. Supersession

Not applicable.

B-6. Comments

Help make this a better tool for evaluating internal controls. Submit comments to Deputy Chief of Staff, G-4 (DALO-MNI), 500 Army Pentagon, Washington, DC 20310-0500.

Glossary

Section I Abbreviations

AWCF

Army working capital fund

CBDM

Chemical Biological Defense Materiel

CBDMRP

Chemical Biological Defense Materiel Reliability Program

CBDMSP

Chemical Biological Defense Materiel Surveillance Program

COSIS

care of supplies in storage

DLAR

Defense Logistics Agency Regulation

DOD

Department of Defense

ESA

Engineering Support Activity

FMS

foreign military sales

LCMC

Life Cycle Management Command

MIL-STD

military standard

OMA

operation and maintenance, Army

SFTP

Shelf-life Function Test Program

SB

supply bulletin

Section II Terms

Chemical Biological Defense Materiel Reliability Program

The CBDMRP ensures suitable storage facilities and equipment are available, maintained, and meet all applicable Occupational Safety and Health Administration, safety and reliability standards. The CBDMSP also provides guidance to facilities storing CBMD and taking corrective actions, as required to maintain CBDM stocks in satisfactory conditions.

Chemical Biological Defense Materiel

Any equipment used by DOD personnel in the performance of their duties in a chemically or biologically hazardous or contaminated area including protective clothing, shelters, masks, detectors, and decontamination equipment.

Section III**Special Abbreviations and Terms**

This section contains no entries.

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