

# Army Corrosion Prevention and Control Requirements



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Dan Nymberg  
Focused Workshop on Cadmium Plating Alternatives

08-30-2011

# Report Documentation Page

Form Approved  
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE <b>30 AUG 2011</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-2011 to 00-00-2011</b>	
4. TITLE AND SUBTITLE <b>Army Corrosion Prevention and Control Requirements</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>Army Tank Automotive Research, Development and Engineering Center ,6501 E. 11 Mile Road,Warren,MI,48397</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES <b>Focused Workshop on Cadmium Plating Alternatives, August 30-31, 2011, Baltimore, MD. Sponsored by SERDP/ESTCP.</b>					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			

- Department of Defense Direction
- Army Direction
- Government Furnished Equipment
- Commercial Off The Shelf
- Materiel Programs

## *Department of Defense Directive DODD 5000.01*

- Requires corrosion prevention and control (CPC) programs and preservation techniques be implemented throughout the lifecycle of all military equipment
- Requires Program Manager to establish a Corrosion Prevention and Control Plan (CPCP) for major acquisitions

## *Department of Defense Instruction DODI 5000.02*

- Requires programs to consider CPC during the acquisition lifecycle process
- Requires corrosion considerations be included in trade-off analysis

## *Department of Defense Directive DoDD 4151.18, Maintenance of Military Materiel*

- Corrosion shall be evaluated for its effect on logistics and readiness
- Conclusions/recommendations shall be used to implement CPC measures to avoid effect of corrosion on logistics & readiness

## Chairman of the Joint Chiefs of Staff CJCSM 3170.01

- Requires the Programs to establish key performance parameters (KPP) that can be verified by testing.
- CPC falls under the Sustainment KPP since corrosion typically develops over time.
- Sustainment includes Key System Attributes (KSA)
  - Operational Availability
  - Materiel Availability

- Materiel shall meet the lifecycle and corrosion requirements when subjected to the conditions defined in the Operations Mode Summary / Mission Profile (OMS/MP)
- Only routine maintenance needed

## System Design Lifecycle

- Includes corrosion performance
- Free of functional failures caused by corrosion
- Not expected to be corrosion-free

- Government Material
  - May be attached to an end item
  - May be consumed in the performance of a contract
  - Includes such items as raw and processed material, components, parts, small tools, and supplies
- Gov Furnished Property
  - Acquired by the government and provided to the contractor

- COTS items are purchased “as is” from commercial source

- Current target is generally 20+ years without failure due to corrosion, given routine maintenance
- Each Program has leeway to define target corrosion lifecycle