Facilities Related Policy and Guidance Summary

(http://wbdg.org/resources/cpcsource.php)

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Facilities acquisition management and associated actions are shaped by the nature of an installation's mission, which includes the requirements placed upon it by weapon systems, operational demands, ongoing sustainment, modernization and maintenance programs, and the policies that dictate management, budget constraints, and Congressional Guidance.

Figure 1 shows the relationship between the various policies and guidance within the Department of Defense (DoD). The laws and executive orders guide the DoD and military departments. DoD translates legislative and executive direction into guidance and policy that enables compliance with the law.

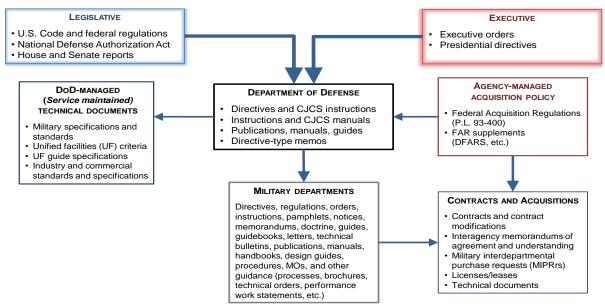


Figure 1. DoD Policy Hierarchy Relationships

The DoD has in-place extensive policy and guidance as illustrated in Table 1 to facilitate effective management of the many and complex areas required to provide for the National Defense. Decisions made in facilities affect the readiness and availability of equipment and operations. In order for weapon systems to effectively be supported, facilities must be in synch with the requirement. For example, support facilities must be sized to the requirement (e.g. ship, aircraft, ground equipment) and they must be available and functioning when needed. Corrosion shortfalls affect facilities readiness and the long-term ability of the facility to support the mission.

Included in Table 1 are policies and guidance that establish the overarching requirement that ultimately serves as the basis for which corrosion prevention and control (CPC) is required and achieved. The CPC function is an essential part of the facilities program in support of the readiness mission for the Department. For CPC to be effectively accomplished, overarching policy and guidance must be in place in the form of Acquisition Regulations, Department of Defense Directives (DoDD), Department of Defense Instructions (DoDI), DoD Manuals, Memos, and Criteria addressing essential areas such as Military Construction, sustainment, restoration and modernization (SRM) and maintenance programs. Weapons and facilities acquisition systems must be wellexecuted to provide for a seamless delivery system that meet requirements.

Recent revisions to the UFC and UFGS criteria have placed additional emphasis on CPC emphasizing the selection of corrosion resistant materials. The most significant reason for this has been the addition of the requirement (see UFC 1-200-01 *DoD Building Code*) to incorporate Environmental Severity Classification (ESC) zone identification and related CPC language into facilities design and construction contracts.

While the specific policy and guidance documents listed below might not specifically refer to CPC, where they reference or mandate the use of UFCs, then CPC is included as well (see Chapter 4 and Appendix A, UFC 1-200-01, *DoD Building Code)*. The list of Policies and Guidance is not intended to be complete. Rather, it is intended to provide the user with insights into the types of guidance related to design, construction and sustainment of facilities, as well as CPC touchpoints.

For additional information see:

- Chapter 2 and Appendix B of the *Facilities and Infrastructure Corrosion Evaluation Study* (*FICE*) *Study*
- The <u>CPC Source Acquisition Issues</u> Page
- The <u>CPC Source Criteria</u> Page
- The <u>CPC Source Design and Construction Issues</u> Page

Policy, Guidance, or Regulation	Title	Relevance	Applicability
Department of Defe	nse		
Joint Publication 3-34 (6 January 2016)	Joint Engineer Operations	 Presents Joint Engineer Fundamentals Describes Command and Control of Joint Engineer Operations Discusses Engineer Planning and Planning Considerations Describes the Engineer Functions of Combat Engineering, and Geospatial Engineering, and Geospatial Engineering 	Describes and defines engineer support in Joint Operations: "Engineer operations integrate combat, general, and geospatial engineering to meet national and joint force commander (JFC) requirements to facilitate the mobility and survivability of friendly forces; counter the mobility of enemy forces; and provide infrastructure to position, project, protect, and sustain the joint force." Keywords in JP 3-34 include: Design, Real Estate Acquisition, Criteria, UFC, Engineering, Planning, Expeditionary and Semi-permanent Construction, Construction Management, Inspection, As-Built Drawings, Life Sustaining Infrastructure, Repair, Hardening
DODI 5000.67 (31 August 2018)	Prevention and Mitigation of Corrosion on Military Equipment and Infrastructure	Establishes OSD CPC policy for military equipment and infrastructure and provides implementation guidance for 10 USC Sect. 2228.	Provides guidance for CPC in facilities and infrastructure program management.
DODD 4270.5 (31 August 2018)	<i>Military Construction</i>	Establishes policies, au- thorities, and responsi- bilities for the military construction (MILCON) program.	Assigns responsibilities for the execution of the MILCON Program as delineated in 10 USC 169. Requires the use of crite- ria to the greatest extent possible for planning, design, and construction of fa- cilities. Applies to MILCON and Sustain- ment, Restoration and Modernization (SRM) programs. Identifies MIL-STD- 3007B procedures for UFC and UFGS.

Table 1 Facilities CPC Policy and C	Guidance Summary
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Policy, Guidance, or Regulation	Title	Relevance	Applicability
MIL-STD-3007	Department of Defense Standard Practice Unified Facilities Criteria and Unified Facilities Guide Specifications	Establishes procedures for the development and maintenance of UFC & UFGS to be used for the planning, de- sign, construction, O&M, sustainment, res- toration, & moderniza- tion of DoD facilities. Establishes the respon- sibilities and authorities for the Engineering Senior Executive Panel (ESEP) for the UFC program.	UFC and UFGS provide facility plan- ning, design, construction, operations, and maintenance criteria for DoD com- ponents and other supported agencies. "UFC, FC [Facilities Criteria], and UFGS provide facility planning, design, con- struction, operation and maintenance, sustainment, restoration, and moderni- zation criteria for facilities owned by the DoD."
<u>DoD Guidebook,</u> <u>(Spiral 4),</u> (4 February 2014)	Corrosion Prevention and Control Planning Guidebook for Military Systems and Equipment (Spiral 4)	Provides guidance for CPC planning.	Provides detailed insights into CPC for facilities as it relates to ACAT Program Support. CPC guidance for facilities can be found on the WBDG.org <u>CPC Source</u> and in appropriate UFCs and UFGSs.
<u>Whole Building</u> <u>Design Guide</u>	DoD Unified Facilities Criteria Program	UFC, UFGS, Codes, Standards, Guidance, References for DoD and subscribing agencies	Provides a broad range of in depth criteria, standards, best practices, and material requirements for CPC-related facilities and infrastructure procurement, SRM & construction.
<u>Whole Building</u> <u>Design Guide –</u> <u>CPC Source</u>	See <u>the CPC</u> <u>Source Webpage</u>	The CPC Source pro- vides just in time infor- mation, training, and knowledge for plan- ners, designers, con- structors, and maintainers for assis- tance in planning, iden- tifying, repairing, or eliminating corrosion during the facilities life cycle.	Provides a broad range of in depth criteria, standards, best practices, and material requirements focused on CPC for facilities and infrastructure procurement, SRM & construction.

Policy, Guidance, or Regulation	Title	Relevance	Applicability
Department of the A	Army	-	
<u>AR 700-127</u> (22 October 2018)	Logistics: Integrated Product Support (IPS)	Policy establishes requirement for IPS in support of Army materiel implementing DODD 5000.01, DODI 5000.02 and DODI 5000.67.	Directs that the Life Cycle Sustainment Plan (LCSP) be aligned with CPC; directs that LCSP will evaluate CPC; includes facilities as an IPS element & facilities considerations validation for ACAT program; directs design for corrosion resistance [materiel]. Requires ACSIM to participate in IPS & program for new or modified facilities.
<u>AR 750-59</u> (22 June 202)	Maintenance of Supplies and Equipment: Cor- rosion Preven- tion and Control Program for Army Materiel	Policy defines all areas where corrosion pre- vention and control should be considered throughout the life cy- cle.	Addresses CPC in the context of facili- ties. Defers coverage for facilities CPC to ACSIM and AR 420-1 (see below).
<u>AR 420-1</u> (12 February 2008)	Facilities Engineering: Army Facilities Management	Addresses the management of Army facilities, including public works, housing, facilities operations and management, master planning, utilities, and energy management, as well as fire and emergency services. Includes CPC management and policy guidance.	Establishes Army corrosion control policy for facilities (Sec IV, para 2-32); requires CPC Advisory Teams (CPAT) & Contractor Corrosion Teams (CCTs) for projects > \$5M, but CPC measures must be considered for all construction, repair, and maintenance projects regardless of cost or funding source. IMCOM responsible for implementing Army CPC Policy; requires CPC technical support info & guidance to field; maintain Army corrosion control guidance; prepare & revise tri-service corrosion prevention technical pubs; each region & garrison must have a trained corrosion manager (para 2-33).

Policy, Guidance, or Regulation	Title	Relevance	Applicability
<u>AR 750-1</u> (28 October 2019)	Maintenance of Supplies and Equipment: Army Materiel Maintenance Policy	This regulation applies to the Regular Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve, unless otherwise stated.	Covers Department of the Army policy for general maintenance operations; commodity-oriented maintenance operations; maintenance management systems; inter-Service and contract maintenance support; sustainment maintenance including national maintenance; maintenance support during acquisition; maintenance programs; and depot maintenance. Includes several references to Corrosion and CPC. References DoDD 4151.18 <i>Maintenance of Military Materiel</i> which has CPC requirements.
<u>DA PAM 750-1</u> (4 December 2013)	Maintenance of Supplies and Equipment: Commander's Maintenance Handbook	Discusses wide spectrum of maintenance topics required for day-to-day operations to include CPC.	References CPC Program & AR 750-1 and AR 750-59 & discusses evaluation of facilities in support of mission. Chapter 2-1.g: "Maintenance facilities. These structures are significant maintenance enablers and centers of production that ensure the unit meets the maintenance and readiness standards. Commanders should work closely with garrison offi- cials to ensure the installation maintains buildings, hardstands, sheds, utilities, and waste and environmental systems."
Technical and Maintenance & Operations Manuals (Dates vary)	Facilities-related design, engineering, and problem solving manuals, to include CPC references.	Topics include waterfront facilities, preventive maintenance, child development centers, electrical (interior and exterior), systems Cx.	See the complete listing at <u>Technical</u> <u>Manuals</u>
<u>Public works</u> <u>technical bulletins</u> (PWTBs) (Dates vary)	Addresses PW management & CPC technical issues.	Topics include utilities, environmental, range management, sewer system analysis, etc.	For a complete listing see <u>PWTBs</u>

Policy, Guidance, or Regulation	Title	Relevance	Applicability
<u>USACE Engineer</u> <u>and Construction</u> <u>Bulletins (ECB)</u> (Dates vary)	range of topics related to design and technical issues.	Topics include utilities, environmental, climate change, design, systems analysis, sustainable design. O&M facility data requirements, etc.	For a complete listing see <u>ECBs</u>
Department of the N	•		
<u>OPNAVINST</u> <u>5450.348A</u> (23 June 2021)	<i>Mission, Functions, and Tasks of Naval Facilities Engineering Command</i>	Defines NAVFAC SYSCOM Roles &Responsibilities, including facilities & corrosion functions.	Discusses R&R for facilities, corrosion, CP, and SME access. NAVFAC provides specialized inspections in CPC related areas such as Corrosion, CP, Paints & Coatings.
<u>OPNAVINST</u> <u>11010.20H Ch1</u> (24 June 2015)	Navy Facilities Projects	Defines authorities, limitations, guidance on classification, preparation, submission, review, approval, reporting of facilities projects for MILCON and SRM.	Provides guidance for management of Navy facilities and infrastructure.
<u>NAVFAC</u> <u>Maintenance and</u> <u>Operations</u> <u>Manuals (MO)</u>	Multiple Topics	NAVFAC MOs describe standardized technical processes & procedures & available & followed. While many of these MO's are no longer considered current, they refer extensively to corrosion (i.e. Maintenance of Fender Systems & Camels, Inspection of Shore Facilities, Electrical Power Distribution Systems Operations, etc.)	Includes wood protection, petroleum facilities, waterfront facilities. For a complete list see <u>MO</u>

Policy, Guidance, or Regulation	Title	Relevance	Applicability
<u>NAVFAC P-</u> <u>Publications</u>	Varies	NAVFAC publications (handbooks) are provided to establish official Navy Facilities topic specific guidance.	Topics include Design and Engineering Lessons Learned (includes extensive corrosion topics), Economic Analysis Handbook (airframe corrosion), & Asbestos Program Management. See <u>P-</u> <u>Publications</u>
<u>Marianas Navy and</u> <u>Marine Corps</u> <u>Design and</u> <u>Construction</u> <u>Standards</u> (September 2017)	Marianas Navy and Marine Corps Design and Construction Standards	Provides location- specific design & construction standards, including CPC ESC Zone 5 facilities risks.	Provides Guam design, engineering and construction requirements in addition to UFC/UFGSs, & other resources to requirements. See <u>MDACs</u>
Department of the Air Force			

Policy, Guidance, or Regulation	Title	Relevance	Applicability
<u>AFPD 32-10</u> (20 July 2020)	<i>Civil Engineering; Installations and Facilities</i>	For AF bases, implementing DODDs & DODIs; describes facilities SRM resourcing, authorities, management, & responsibilities.	CPC is not specifically mentioned; requires life-cost considerations and investment level determinations, making assessments on assets relative to mission support.
<u>AFI 32-1001</u> (25 October 2019)	<i>Civil Engineering: Civil Engineer Operations</i>	Implements AFPD 32- 10, <i>Installations and</i> <i>Facilities</i> . Provides directive requirements for the operations management of civil engineering.	Directs that a preventive maintenance program be established, executed & monitor-ed. Establishes a civil engineer worldwide baseline set of definitions, operations process descriptions, and organizational guidance. Several references to Corrosion Control Hangars are included. Incorporates AFI 32-1054.
AFMAN 32-1067 (4 August 2020)	<i>Civil Engineering: Water and Fuel Systems</i>	This Air Force Manual (AFMAN) implements Air Force Policy Directive (AFPD) 32- 10, Installations and Facilities and AFPD 32- 70, Environmental Considerations in AF Programs and Activities. It provides guidance for managing water, wastewater, and Petroleum, Oils, & Lubricants (POL) storage tank systems throughout the Air Force.	Has language regarding impressed current cathodic protection requirements for above ground and underground tanks in direct contact with the soil. Includes corrosion protection record keeping requirements.

Policy, Guidance, or Regulation	Title	Relevance	Applicability
<u>AFMAN 32-1065</u> (17 July 2020)	<i>Civil Engineering: Grounding Systems</i>	Assigns maintenance responsibilities and requirements for AF electrical grounding systems at installations & implements the maintenance requirements of DoD 6055.9-STD.	Includes systems for equipment grounding, lightning protection, and static protection. Multiple references to cathodic protection & corrosion for pipelines, electrical systems where grounding is required.
<u>Air Force</u> <u>Handbook 32-</u> <u>1290(I)/</u> <u>MIL-HDBK-1136/1</u> (1 February 1999)	<i>Cathodic Field</i> <i>Testing</i>	Summarizes actions to be taken in operating and maintaining various cathodic protection systems in use at military installations.	Instruction provided on testing procedures necessary to ensure system function & maintenance actions for cathodic protection in facilities affected & aids craftsman at unit level.
Note: ACAT = Acquisition Category; AF = Air Force; AFG = Air Force Guide; CP = Cathodic Protection; CoC = Chain of Command; Cx = Commissioning; DOTmLPF-P = (Joint) Doctrine, Organization, Training, materiel, Leadership and Education, Personnel, Facilities, and Policy; FAR = Federal Acquisition Regulations; NAVFAC = Naval Facilities Engineering Command; FEC = Facilities Engineering Command; HVAC = Heating, Ventilation, & Air Conditioning; ILS = Integrated Logistics Support; MO = Maintenance and Operations Manual; NAVFAC = Naval Facilities Engineering Command; OSD = Office of the Secretary of Defense; O&M = Operations and Maintenance; PW = Public Works; PWD = Public Works Department; SME = Subject Matter Expert; SYSCOM = Systems Command; TOC = Total Ownership Cost; UFC = Unified Facilities Criteria; UFGS = Unified Facilities Guide Specifications.			