

ENGINEERING AND US Army Corps CONSTRUCTION BULLETIN

No. 2017-11 **Issuing Office:** CECW-CE **Issued:** 18 May 17 Expires: 18 May 19

SUBJECT: Corrosion Prevention and Control Training and Resources

For Information and Guidance **CATEGORY:**

- 1. This ECB provides information on Corrosion Prevention and Control training and resources.
- 2. Corrosion Prevention and Control (CPC) considerations and implementation is critical to USACE design and construction activities. CPC requirements have been included in recent National Defense Authorization Act (NDAA) and the Water Resources Reform and Development Act (WRRDA). To enhance corrosion prevention and control management, DoD has initiated action for providing specific corrosion prevention related training to DoD personnel tuition free.
- 3. An email sent by Robert Rizzieri, Deputy, Engineering and Construction, on 30 Jan 17 to all Chiefs of Engineering and all Chiefs of Constructions provides the course schedule and instructions for registration for various Society of Protective Coatings (SSPC) classes that DoD has funded. Many of these classes are web-based. Chiefs of Engineering and Construction should review the available classes and coordinate with the needed skill set for their personnel. As stated in the email, deadline dates to register for all courses is 21 days before the start of the training. These classes are on a first come first serve basis with only the cost of the course tuition funded by DoD. This funding is available for FY17 only.
- 4. Other corrosion prevention and control resources available to USACE include:
- a. The Technical Center of Expertise (TCX) for Corrosion Control and Cathodic Protection Systems at Mobile District maintains state-of-the-art technical expertise regarding all-types of corrosion control and cathodic protection systems for use on Army, Air Force, and USACE facilities. Personnel at the center include electrical and electronic engineers, with NACE certifications as Cathodic Protection Specialists. The TCX web link provides further information and is at: http://www.sam.usace.army.mil/Missions/Military-Missions/Engineering/Corrosion-Control-and-Cathodic-Protection-Systems/.
- b. The Paint Technology Center (PTC), located at ERDC's Construction Engineering Research Laboratory (CERL) in Champaign, IL, is the US Army Corps of Engineers TCX for paints and coatings. The PTC web link that provides additional information on the center and points of contacts is: http://www.erdc.usace.army.mil/Media/Fact-Sheets/Fact-Sheet-Article-View/Article/476731/paint.technology-center/.
- c. PROSPECT Course #009, Corrosion Control Topics included in this course are: fundamentals of corrosion and engineering alloys; principles and design of cathodic protection and electrode potentials; design considerations; atmospheric corrosion; design for underground

ECB No. 2017-11

Subject Corrosion Prevention and Control Training and Resources

cathodic protection systems; types of corrosion; painting practices; sea water corrosion; system test and evaluation; and material selection.

- d. PROSPECT Course #84, Paint Coatings and Quality Verification –Topics included in this quality verification course are: paint fundamentals; characteristics and selection of coatings; surface preparation and painting of metals, concrete and masonry surfaces, wood, wallboard, and other miscellaneous surfaces; paint defects; paint approval; testing instruments; and safety, environmental, and sustainability considerations. UFGS 09 90 00, Paints and Coatings, and UFGS 09 97 02, Painting: Hydraulic Structures, are emphasized, to include the use of the Master Painter's Institute (MPI) specifications and its application to the design-build process.
- e. The DoD Office of Corrosion Policy and Oversight is partnering with the National Institute of Building Sciences in providing short training vignettes on corrosion prevention, mitigation, policy, criteria, and best practices. The training is intended for all building and infrastructure professionals involved in the planning, design, construction, quality control, sustainment, and maintenance of DoD facilities. Most of the training vignettes can be completed in 20 minutes or less and is accessible at:

 $\frac{\text{http://wbdg.org/resources/cpcsourcetraining.php\#sts=Vignette\%201.\%20Corrosion\%20Overvie}{\underline{w}}$

- (1) <u>Vignette 1. Corrosion Overview</u>
- (2) <u>Vignette 2. Facility and Infrastructure Corrosion Prevention and Control Planning, Project Development, and Design</u>
- (3) <u>Vignette 3. Introduction to Paints and Coatings for the Facilities and Infrastructure</u> Professional
- (4) <u>Vignette 4. Facility and Infrastructure Corrosion Prevention and Control –</u> Sustainment (Repair and Maintenance)
- (5) <u>Vignette 5. Facility and Infrastructure Corrosion Prevention and Control Construction and Quality Control</u>
- 5. **Point of Contact.** HQUSACE point of contact for this ECB is Paul Dicker, CECW-CE, (202) 761-0995.

//S//

LARRY D. MCCALLISTER, PhD, PE, PMP, SES Chief, Engineering and Construction Directorate of Civil Works