

ENGINEERING AND CONSTRUCTION BULLETIN

No. 2014-21 Issuing Office: CECW-CE Issued: 23 Oct 2014 Expires: 23 Oct 2016

Subject: Adsorption Design Guide Update

Applicability: Guidance

Reference: Design Guide (DG) 1110-1-2, 1 Mar 2001, Subject: Adsorption Design Guide

- 1. **Purpose.** The attached design guide is an update to DG 1110-1-2 referenced above. It provides instructions for the basic design of liquid and vapor phase adsorption processes. (Adsorption occurs when atoms, ions or molecules from a substance adhere to a surface of the adsorbent material.) These processes can remove organic contaminants from liquid and vapor phase streams. Included are principles and theory of adsorption, liquid and vapor phase carbon adsorption, carbon regeneration, and non-carbon adsorption. This ECB is effective when issued.
- 2. **Scope**. This design guide applies to all USACE elements, major subordinate commands (MSC), districts, laboratories, and field operating activities (FOA) responsible for HTRW remediation projects.
- 3. **Policy.** This engineering and design is applicable to all projects executed by the Corps of Engineers. If required, cleanup is conducted at both Federal and commercial sites including Department of Defense installations.
- 4. **Contact**. The technical point of contact for the Adsorption Design Guide is Kevin H. Coats, Environmental and Munitions Center of Expertise, at phone number 402-697-2563 or email Kevin.H.Coats@usace.army.mil. The Headquarters USACE point of contact for the distribution of this ECB is Eric Mucklow at 202-761-0522 or email address eric.mucklow@usace.army.mil.

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JAMES C. DALTON, P.E., SES Chief, Engineering, and Construction U.S. Army Corps of Engineers

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