



Center for Contaminated Sediments

Advancing the use of
innovative science and
engineering in the
assessment and
management of
contaminated sediments

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Center for Contaminated Sediments

The U.S. Army Corps of Engineers Center for Contaminated Sediments serves as a clearinghouse for technology and expertise concerned with contaminated sediments. The Center's mission is to advance the development and application of sound science and engineering principles and technology in the assessment and management of contaminated sediments. The Center pursues this mission through sponsoring development of new initiatives and innovative technologies, organizing and sponsoring technical workshops and symposia, and working on contaminated sediment projects with other organizations within the Corps, Department of Defense, other federal and state agencies, academia, and the private sector.

With more than two decades of experience in various aspects of identifying, delineating, assessing, remediating, and managing contaminated sediments, Corps engineers and scientists are on the cutting edge of research in this important area. This expertise is a direct result of research and development activities funded in support of the Corps' navigation mission and reimbursable work related to site assessment and cleanup for other elements within the U.S. Department of Defense, the U.S. Environmental Protection Agency, and others.

<http://www.wes.army.mil/el/dots/ccs>



**US Army Corps
of Engineers®**



Expertise

- ↳ Staff of Experienced Researchers and Technical Specialists
 - ⇒ Civil and Environmental Engineers
 - ⇒ Biologists and Ecologists
 - ⇒ Soil Scientists and Geochemists
- ↳ Field and Laboratory Support

Capabilities

- ↳ Site Characterization
- ↳ Sediment Sampling
- ↳ Screening Evaluations
- ↳ Environmental Modeling
- ↳ Testing and Assessment Protocols
 - ⇒ Bioassays
 - ⇒ Contaminant Pathway Tests
- ↳ Environmental Impact Evaluations
- ↳ Risk Assessment
- ↳ Dredging Technology Evaluations
- ↳ Dredged Material Placement Evaluations
 - ⇒ Confined Disposal Facilities (CDFs)
 - ⇒ Capping and Contained Aquatic Disposal (CAD)
 - ⇒ Beneficial Use Applications
- ↳ Sediment Remedial Feasibility Studies
 - ⇒ Monitored Natural Recovery Processes
 - ⇒ In Situ Containment and Capping Environmental Dredging Options
 - ⇒ Containment Facilities and Controls
 - ⇒ In Situ and Ex Situ Treatment
- ↳ Site Management and Monitoring Plans
- ↳ Dredged Material Management Plans

Facilities

- ↳ Most Modern DoD Environmental Complex
- ↳ Hazardous Waste Research Facility
 - ⇒ Technology Assessments
 - ⇒ Treatability Studies
- ↳ Environmental Chemistry Facility
 - ⇒ Methods Research
 - ⇒ Specialty Tests (e.g., Dioxins, Explosives)
- ↳ Unique Facilities
 - ⇒ Flow-Through Aquatic Toxicology Exposure System (FATES)
 - ⇒ World's Largest Research Centrifuge

Research Activities and Programs

- ↳ Dredging Operations and Environmental Research (DOER) Program
 - ⇒ Contaminated Sediments
 - ⇒ Innovative Technologies
 - ⇒ Risk Assessment
- ↳ Cooperative Research and Development Agreements (CRDAs) with Non-Federal Partners
- ↳ Work with Other Research Organizations
 - ⇒ EPA Laboratories
 - ⇒ EPA Assessment and Remediation of Contaminated Sediments (ARCS) Program
- ↳ International Activities and Agreements
 - ⇒ London Convention
 - ⇒ US-Japan Sediment Experts
 - ⇒ US-Netherlands Sediment Experts
 - ⇒ Norwegian Environmental Technologies
 - ⇒ International Training

Sponsors

- ↳ U.S. Army, U.S. Navy, USMC and USCG
- ↳ USACE Headquarters, Divisions, and Districts
- ↳ EPA Headquarters and Regions
- ↳ Natural Resource Trustee Agencies
 - ⇒ NOAA
 - ⇒ F&WS
- ↳ State Environmental and Resource Agencies

Guidance

- ↳ USACE/EPA Dredged Material Alternatives Technical Framework
- ↳ EPA/USACE Dredged Material Testing Manuals for Inland and Ocean Waters
- ↳ USACE Risk Assessment Guidance for Contaminated Sediments
- ↳ USACE Engineer Manuals on Dredged Material Management
- ↳ USACE Implementation Memorandum for Sediment Quality Guidelines
- ↳ USACE/EPA Guidance for Subaqueous Dredged Material Capping
- ↳ EPA ARCS Remediation Guidance Document
- ↳ EPA ARCS Contaminant Loss Estimates for Remediation Options
- ↳ EPA ARCS Guidance for In Situ Subaqueous Capping
- ↳ International Navigation Association (PIANC) Guidance