



## Contaminated Sediment Remediation Guidance for Hazardous Waste Sites



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## **DISCLAIMER**

EPA is issuing this draft document to ask for public comment. When finalized, this document will provide technical and policy guidance to the U.S. Environmental Protection Agency (EPA) and state staff on making risk management decisions for contaminated sediment sites. It also will provide guidance to the public and to the regulated community on how EPA intends to exercise its discretion in implementing its regulations at contaminated sediment sites. It is important to understand, however, that this document does not substitute for statutes EPA administers nor their implementing regulations, nor is it a regulation itself. Thus, even when finalized this document will not impose legally-binding requirements on EPA, states, or the regulated community, and may not apply to a particular situation based upon the specific circumstances. Rather, the draft document suggests approaches that may be used at particular sites as appropriate, given site-specific circumstances. EPA expects to change this draft document based on public comment. Even after the document is finalized, however, EPA will welcome public comments on the document at any time and will consider those comments in any future revisions to the document which EPA may make without public notice.

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## ACRONYMS

|         |  |
|---------|--|
| ADCP:   | Acoustic Doppler Current Profiler  |
| ADDAMS: | Automated Dredging and Disposal Alternatives Management System               |
| AOC:    | Administrative Order on Consent  |
| ARAR:   | Applicable or Relevant and Appropriate Requirement                           |
| ARCS:   | Assessment and Remediation of Contaminated Sediments                         |
| ASTM:   | American Society for Testing and Materials                                   |
| AVS:    | Acid Volatile Sulfide  |
| AWQC:   | Ambient Water Quality Criteria   |
| BSAF:   | Biota Sediment Accumulation Factors  |
| BEAST:  | Benthic Assessment of Sediment   |
| CAD:    | Contained Aquatic Disposal   |
| CAG:    | Community Advisory Group   |
| CASRGW: | Contaminated Aquatic Sediment Remedial Guidance Workgroup                    |
| CD:     | Consent Decree   |
| CDF:    | Confined Disposal Facility   |
| CERCLA: | Comprehensive Environmental Response, Compensation, and Liability Act (1980) |
| COC:    | Contaminants of Concern  |
| CRC:    | Coastal Resource Coordinator   |
| CSM:    | Conceptual Site Model  |
| CSTTP:  | Contaminated Treatment Technology Program                                    |
| CWA:    | Clean Water Act  |
| DDD:    | Dichloro-Diphenyl-Dichloroethane   |
| DDE:    | Dichloro-Diphenyl-Dichloroethylene   |
| DDT:    | Dichloro-Diphenyl-Trichloroethane  |
| DGPS:   | Differential Global Positioning System                                       |
| DNAPL:  | Dense Non-Aqueous Phase Liquids  |
| DOD:    | Department of Defense  |
| DOE:    | Department of Energy   |
| DOI:    | Department of the Interior   |
| DQO:    | Data Quality Objective   |
| EPA:    | Environmental Protection Agency  |
| ESD:    | Explanation of Significant Difference  |
| ESGs:   | Equilibrium-partitioning Sediment Guidelines                                 |
| ET:     | Ecotox Threshold   |
| FIELDS: | Fully Integrated Environmental Location Decision Support                     |
| FFRRO:  | Federal Facilities Restoration and Reuse Office                              |
| FMP:    | Fishery Management Plan  |
| FS:     | Feasibility Study  |
| GIS:    | Geographic Information System  |
| GPS:    | Global Positioning System  |
| GLNPO:  | Great Lakes National Program Office  |
| HASP:   | Health and Safety Plan   |
| HSRC:   | Hazardous Substance Research Center  |
| HWIR:   | Hazardous Waste Identification Rule  |

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|           |   |
|-----------|---|
| IC:       | Institutional Control   |
| LTFATE:   | Long-Term Fate Model  |
| MNA:      | Monitored Natural Attenuation                                   |
| MNP:      | Monitored Natural Processes                                     |
| MNR:      | Monitored Natural Recovery                                      |
| NAPL:     | Non-Aqueous Phase Liquids                                       |
| NCP:      | National Oil and Hazardous Substance Pollution Contingency Plan |
| NMFS:     | National Marine Fisheries Service                               |
| NOAA:     | National Oceanic and Atmospheric Agency                         |
| NPDES:    | National Pollutant Discharge Elimination System                 |
| NPL:      | National Priorities List  |
| NRC:      | National Research Council                                       |
| O&M:      | Operation and Maintenance                                       |
| OERR:     | Office of Emergency and Remedial Response                       |
| OGC:      | Office of the General Counsel                                   |
| OMB:      | Office of Management and Budget                                 |
| ORD:      | Office of Research and Development                              |
| OSWER:    | Office of Solid Waste and Emergency Response                    |
| OU:       | Operable Unit   |
| OW:       | Office of Water   |
| PAH:      | Polynuclear Aromatic Hydrocarbon                                |
| PA/SI:    | Preliminary Assessment/Site Inspection                          |
| PBTs:     | Persistent Bioaccumulative Toxics                               |
| PCB:      | Polychlorinated Biphenyl  |
| PCLT:     | Pancake Column Leach Test                                       |
| PIANC:    | Permanent International Association of Navigational Congresses  |
| PRGs:     | Preliminary Remediation Goals                                   |
| PRP:      | Potentially Responsible Party                                   |
| QA/QC:    | Quality Assurance/Quality Control                               |
| QAPP:     | Quality Assurance Project Plan                                  |
| RAOs:     | Remedial Action Objectives                                      |
| RCRA:     | Resource Conservation and Recovery Act                          |
| REACH IT: | Remediation and Characterization Innovative Technologies        |
| RGs:      | Remediation Goals   |
| RI:       | Remedial Investigation  |
| ROD:      | Record of Decision  |
| RPM:      | Remedial Project Manager  |
| RREL:     | Risk Reduction Engineering Laboratory                           |
| SAB:      | Science Advisory Board  |
| SEM:      | Simultaneously Extracted Metals                                 |
| SITE:     | Superfund Innovative Technology Evaluation                      |
| SPC:      | Sediment Profile Camera   |
| SQuiRTs:  | Screening Quick Reference Tables                                |
| SSFATE:   | Suspended Sediment Fate Model                                   |
| STFATE:   | Short-Term Fate Model   |
| TAG:      | Technical Assistance Grants                                     |



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|        |  |
|--------|--|
| TBC:   | To-Be-Considered Advisories, Criteria, or Guidance |
| TCLP:  | Toxicity Characteristic Leachate Procedure         |
| TMDL:  | Total Maximum Daily Load                           |
| TMV:   | Toxicity, Mobility, and Volume                     |
| TOC:   | Total Organic Carbon                               |
| TOSC:  | Technical Outreach Services for Communities        |
| TSCA:  | Toxic Substances Control Act                       |
| TSS:   | Total Suspended Solids                             |
| UAO:   | Unilateral Administrative Order                    |
| USACE: | United States Army Corps of Engineers              |
| USCG:  | United States Coast Guard                          |
| USDA:  | United States Department of Agriculture            |
| USFWS: | United States Fish and Wildlife Service            |
| USGS:  | United States Geological Survey                    |
| WES:   | USACE Waterways Experimental Station               |
| WQLS:  | Water Quality Limited Segment                      |
| WRDA:  | Water Resources Development Act                    |