

USACE/ EPA Technical Framework for Environmental Evaluations

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Dr. Robert M. Engler

Robert.m.engler@erdc.usace.army.mil

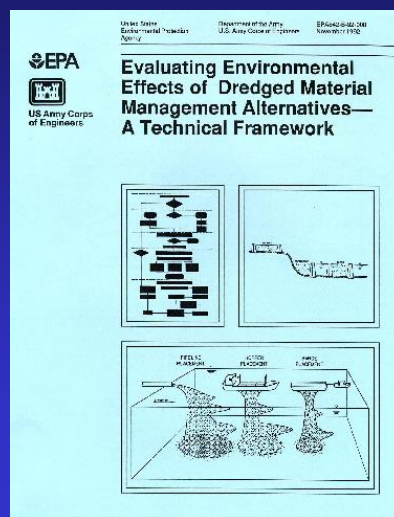
E2D2 KEY WORDS: Technical Framework



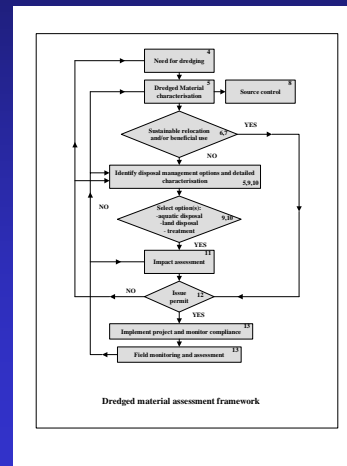
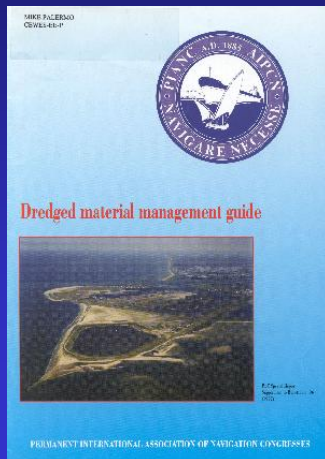
USACE/ EPA Technical Framework



- Jointly Developed
- Alternative Selection
- Environmental Suitability
- Open Water
- Confined (diked)
- Beneficial Uses
- Full range of materials
- Umbrella for OTM, ITM, UTM, etc.



Dredged Material Assessment Framework (PIANC)



Technical Framework Objectives

- Provides technical framework for full continuum of management alternatives
- Provides umbrella guidance for application of detailed testing manuals, etc.
- Provides a jointly developed and endorsed USACE/ EPA approach
- Enhances consistency and coordination in USACE/ EPA decision-making

Technical Framework Meets Substantive and Procedural Requirements of:

- Clean Water Act
- Marine Protection Research and Sanctuaries Act
- National Environmental Policy Act

Technical Framework – Joint Agency Guidance

- Joint USACE/EPA Publication
 - EPA842-B-92-008
 - <http://www.epa.gov/OWOW/oceans/framework/index.html>
- Cited in USACE O&M Regulations
 - 33 CFR 336.1
 - Management Strategy as updated jointly by USACE/EPA

Framework for Environmental Acceptability of Dredged Material Disposal Alternatives

Evaluation of Dredging Project Requirements



Identification of Alternatives



Initial Screening of Alternatives



Detailed Assessment of Alternatives



Alternative Selection

NEPA Requirements

- NEPA and MPRSA/CWA require alternatives evaluation
- Every navigation dredging “project” has a NEPA document
- Changes in alternatives require a new NEPA evaluation

Framework for Testing and Evaluation for Open Water Disposal

Determine Characteristics of Potential Sites (4.1)



Evaluate Direct Physical Impacts and Site Capacity (4.2)



Evaluate Contaminant Pathways of Concern (4.3)



Evaluate Control Measures for Pathways of Concern (4.4)



Retain Environmentally Acceptable Alternatives (4.4.5)

Open Water Evaluations

- Physical Effects/Site Capacity
 - STFATE, MDFATE, LTFATE
- Contaminant Effects
 - Water Column and Benthic
 - Suitability for OW Placement
 - Ocean Testing Manual
 - Inland Testing Manual



Framework for Testing and Evaluation for Confined (Diked) Disposal

Determine Characteristics for all Potential Confined Sites (5.1)



Evaluate Direct Physical Impacts and Site Capacity (5.2)



Evaluate Contaminant Pathways of Concern (5.3)



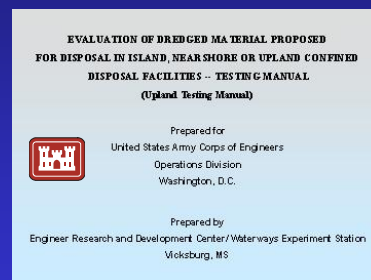
Evaluate Control Measure for Contaminant Pathways of Concern (5.4)



Retain Environmentally Acceptable Alternatives (5.5)

Confined (Diked) Disposal Evaluations

- Retention/ Site Capacity
 - EM Confined Disposal
- Contaminant Effects
 - Effluent, Runoff, Leachate, Uptake, Volatiles
 - Upland (CDF) Testing Manual



Framework for Testing and Evaluation for Beneficial Uses of Dredged Material

Determine Beneficial Use Needs and/or Opportunities ^(6.2)



Evaluate Physical Suitability of Material for Proposed Uses ^(6.3)



Evaluate Logistical and Management Requirements ^(6.4)



Evaluate Environmental Suitability ^(6.5)



Retain Environmentally Acceptable Alternatives ^(6.6)

Beneficial Use Evaluations

- Technical Suitability
 - Physical and Environmental
 - EM Beneficial Uses
 - Additional Guidance under development
- Logistical/Management
 - EPA BU Planning Manual

Technical Framework Summary

- Reflects real-world conditions
- Reflects aquatic, intertidal, and upland environments
- Indicates biological availability of contaminants
- Predicts potential environmental impacts
- Provides appropriate level of protection
- Is consistent with CWA, MPRSA, and NEPA

Basic References

- Technical Framework for Environmental Evaluations
- Engineer Manual Series
 - Dredging and Dredged Material Disposal
 - Beneficial Uses of Dredged Material
 - Confined Disposal of Dredged Material
- Testing Manuals
 - Ocean Testing Manual (Green Book)
 - Inland Testing Manual
 - Upland (CDF) Testing Manual

www.wes.army.mil/el/dots [click on guidance docs](#)