

Federal Standard for Corps of Engineers Dredged Material Management: Misnomers and Clarifications

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The Federal Standard (33 CFR 336.1)

- **Definition**—The least costly dredged material management alternative (method), consistent with sound engineering practices and selected through Section 404(b)(1) Guidelines
 - ▶ **Purpose**—Set the benchmark for Federal funding decisions regarding dredged material management



Common Misnomers

- **Federal Standard = Federal guidelines**

FEDERAL STANDARD

- ▶ NOT an environmental standard
- ▶ A dredged material management determination

FEDERAL GUIDELINES

- ▶ Environmental guidelines under Section 404(b)(1) of the Clean Water Act
- ▶ Applied in determining the Federal Standard

- ▶ **Federal Standard** = Least cost + engineering feasibility + environmentally acceptable (compliance with **Federal guidelines**) alternative



Common Misnomers

- **Environmentally Acceptable = “Environmentally Preferable”**

ENVIRONMENTALLY ACCEPTABLE

▶ Compliance with Clean Water Act Section 404(b)(1) Guidelines, subject to reasonable State Section 401 water quality certification and Coastal Management Program Consistency requirements

“ENVIRONMENTALLY PREFERABLE”

▶ Oftentimes exceed Federal guidelines, which usually increase dredged material placement costs
▶ Optimum environmental solution may exceed Federal guidelines and be more costly



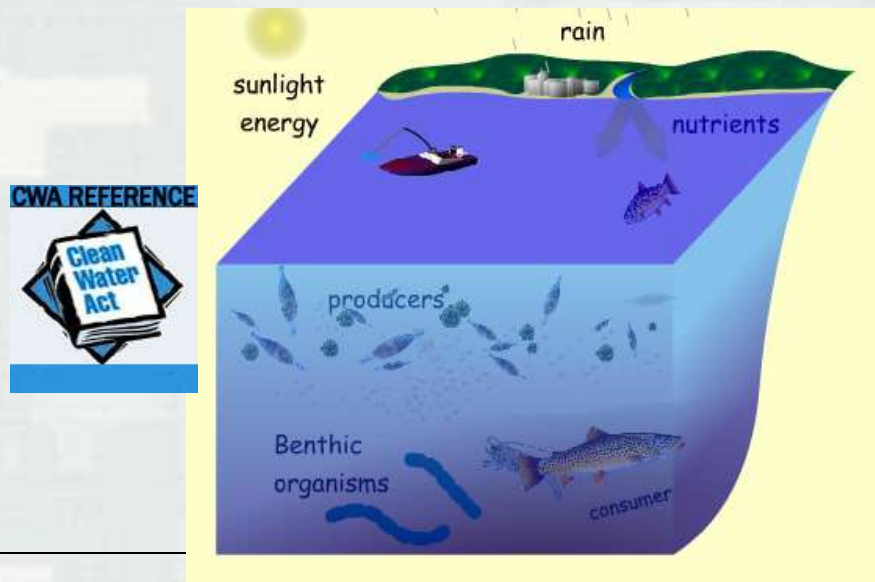
Common Misnomers

- **Federal guidelines and State requirements are totally separable**
 - ▶ **Compliance with Federal guidelines toward the Federal Standard **includes reasonable State requirements** (33 CFR 337.2)**
 - **Compliance with promulgated, relevant and Federally approved State water quality standards (WQSs)**
 - **Achieve consistency to the maximum degree practicable with approved State Coastal Management Program**



Environmental Acceptability Sticking Points

- Confirmation that State requirements are reasonable in terms of relevance and having a basis in sound science
 - ▶ The majority of State requirements are “reasonable” and linked to promulgated State WQSs



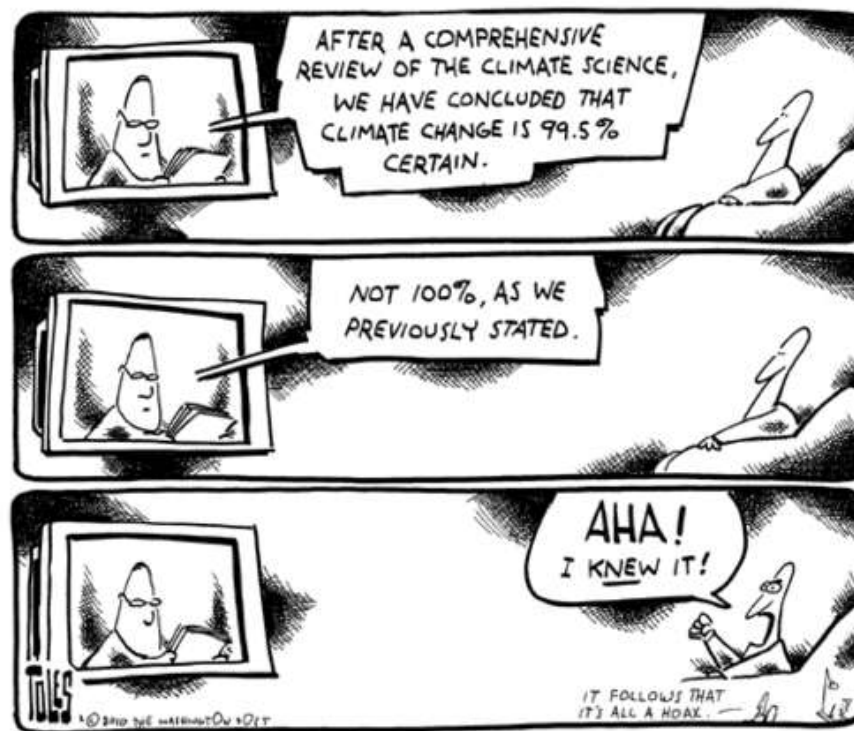
Environmental Acceptability Sticking Points

- **Confirmation that State requirements are reasonable in terms of relevance and having a basis in sound science (cont'd)**
 - ▶ **Examples of “unreasonable” State requirements**
 - **WQSs that are not promulgated**
 - **Promulgated but inappropriate WQSs**
 - **Sediment quality guidelines (SQGs)/criteria (SQC)**
 - **State policies not based on sound science**
 - ▶ **Federal guidelines can be more restrictive than State standards**



Environmental Acceptability Sticking Points

- Scientific Method—Can't prove a negative



Determination of Environmental Acceptability

- **Mainly evaluate dredged material toxicity via Clean Water Act requirements**
 - ▶ ***Great Lakes Dredged Material Testing and Evaluation Manual (1998)*** (per “contaminant determination” [40 CFR 230.11{d}])
 - **Section 404—Tiered Evaluation (contaminants of concern [COCs], modeling, biological testing, risk assessment)**
 - **Section 401—Evaluate compliance with promulgated State WQSs (State water quality certification)**
 - **Section 404(b)(1) Guidelines allow for dredged material management measures if the material does not meet Federal guidelines or comply with relevant State WQSs**



Determination of Environmental Acceptability

- Evaluate Federal consistency with State Coastal Management Program (consistency concurrence)



Examples of Environmental Acceptability Determinations (finally)

- **SCENARIO:**

- ▶ **“Fails” lower Section 404 test requirements**

- **Unacceptable Tier 1 bulk sediment data on PBDEs (flame retardants)**

- **Unacceptable Tier 2 PBDE bioaccumulation modeling**



- **Acceptable Tier 3 PBDE bioaccumulation results**

- ▶ **Exceeds State PBDE sediment quality criterion; does not exceed any promulgated, relevant State WQS**

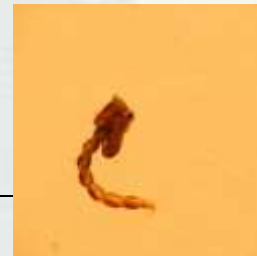
**DETERMINATION—Environmentally
acceptable**



Examples of Environmental Acceptability Determinations

- **SCENARIO:**
 - ▶ **“Passes” Section 404 test requirements**
 - **Acceptable Tier 3 sediment bioassay survival and growth results**
 - **Acceptable Tier 3 PCB bioaccumulation results**
 - ▶ **Clearly exceeds promulgated PCB State WQS that is irrelevant**
- DETERMINATION—**

**Environmentally
acceptable**



Examples of Environmental Acceptability Determinations

- **SCENARIO:**
 - ▶ “Fails” higher Section 404 test requirements
 - Acceptable Tier 3 sediment bioassay survival and growth results
 - Unacceptable Tier 3 water column bioassay survival results
 - ▶ Does not exceed any promulgated, relevant State WQS

DETERMINATION—

**Environmentally
unacceptable**



Examples of Environmental Acceptability Determinations

- **SCENARIO:**
 - ▶ “Fails” higher Section 404 test requirements
 - Acceptable Tier 3 sediment bioassay survival and growth results
 - Unacceptable Tier 3 DDT bioaccumulation
 - ▶ Does not exceed promulgated, relevant DDT State WQS

DETERMINATION—

Environmentally unacceptable



Examples of Environmental Acceptability Determinations

- **SCENARIO:**
 - ▶ **“Passes” Section 404 test requirements**
 - **Acceptable Tier 3 sediment bioassay survival and growth results**
 - **Acceptable Tier 3 water column bioassay survival results**
 - ▶ **Does not comply with dredged material-related State solid waste management or other law (other than the Clean Water Act), policy or Executive Directive, etc.**

DETERMINATION—Environmentally acceptable





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Questions? . . .



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