

# **Dredging Program Technical Workshop: Addressing the Deepwater Horizon Oil Spill**

## **Workshop Goals**

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# Motivation

- Deepwater Horizon oil spill is requiring the EPA and USACE to consider oil and related contaminants as part of the dredging program.
- The MPRSA and CWA regulate dredged material placed in ocean and coastal areas.
- There is a potential that oil may be contaminating sediments to be dredged as well as the placement locations.
- Need a thorough understanding of the chemistry, biology, and engineering issues is required to develop an immediate short-term and long-term process.



**Slide 2**

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**JAS1**

May need to update from results of 8-3 meeting

Jeffery A Steevens, 8/6/2010

# Issues to Be Addressed

- Oil Contaminants
- Dispersants
- Sampling
- Analytical Chemistry
- Screening values
- Bioassays
- Sediment Management



# Expectations and Results

- Consistent understanding of technical issues across EPA/USACE program.
- Develop a coordinated, scientifically-based near-term process for evaluating sediment in the dredging program.
- Develop the basis for long-term assessment of oil contamination using the best available approaches.



# Format

- Policy/Regional Issues
- Technical Presentations
- Breakout Groups
  - ▶ Chemistry, screening, bioassays, DM management, policy
- Report out and establish process



# Regulations

**Joe Wilson**



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# Clean Water Act

- Requires that proposed placement sites be specified through the application of guidelines developed by the Corps and EPA
- Guidelines are based upon criteria applicable to the oceans and territorial seas
- The guidelines/criteria require an effects assessment including:
  - ▶ Plankton, fish, shellfish, wildlife, shorelines and beaches;
  - ▶ Marine life including the transfer, concentration and dispersal of pollutants or their byproducts through biological, physical, and chemical processes;
  - ▶ The effect of disposal of pollutants on esthetic, recreation and economic values; and
  - ▶ Persistence and permanence of effects.





# Marine Protection, Research and Sanctuaries Act

- Except for dredged material the EPA is required to establish and apply criteria for reviewing permit applications for ocean dumping.
- The criteria require an assessment among other things of:
  - ▶ The effect of such dumping on human health and welfare, including economic, esthetic, and recreational values;
  - ▶ The effect of such dumping on fisheries resources, plankton, fish, shellfish, wildlife, shore lines and beaches;
  - ▶ The transfer, concentration, and dispersion of such material and its byproducts through biological, physical, and chemical processes;
  - ▶ Potential changes in marine ecosystem diversity, productivity, and stability;
  - ▶ Species and community population dynamics; and
  - ▶ The persistence and permanence of the effects.

