

# February 18, 2004 Public Meeting

Barge 120 Spill  
Buzzards Bay, Massachusetts

# Technical Team

- Richard J. Wozmak, P.E., P.H., LSP;  
GeoInsight, Inc.
  - LSP-Of-Record
- Kevin Trainer, C.P.G., P.G., LSP;  
GeoInsight, Inc.
  - LSP Representative, Point of Contact for reports of oil
- Wayne Kicklighter, ENTRIX
  - Marine Biology

# Supporting Members

- Mike Hickey, MADMF
- Richard Packard, MADEP
- Dale Young, Massachusetts NRDA Trustee

# Presentation Format

- MCP IRA Update
- Initial MCP Sampling Plan and RAO Evaluation
- Future MCP Activities and Deliverables
- Ongoing Public Outreach
- Specific Information on segments available at booth

# MCP IRA Status Report

- Summarizes results of IRA activities from September through December 2003
- Transmitted to DEP on February 10, 2004
- Included on BuzzardsBay.org website

# MCP IRA – Potentially Buried Oil Inspections

- Inspected 5 segments in December after significant storm event (nor'easter)
- Inspected 7 of 9 segments in January as part of pre-scheduled dates (remaining 2 segments to be inspected in March, weather permitting)
- Buried oil not encountered

# MCP IRA – IRAC Segments with Further Treatment Deemed Feasible

- 5 segments inspected in December
- Limited residual oil observed (e.g., limited splatter) - did not require cleanup under IRA – no mobile oil, no imminent hazard
- Segments will be inspected again in spring

# MCP IRA - Reporting of New Conditions

- No reports of new conditions



# Segment Characterization Approach

- Used to evaluate risk of harm to human health, safety, public welfare, and environment
- Evaluate segments based on initial oiling category
- If conditions represent No Significant Risk – Obtain Response Action Outcome (RAO) for the segments within the oiling category
- DEP in agreement with approach

# Step 1

- Develop Conceptual Site Model (CSM)
  - Defines oil release characteristics, mobility, deposition and fate in environment, and potential exposures (tells the story of what happened during the release and potential exposure scenarios)
  - CSM used to develop sampling and evaluation protocol (where and what media do we sample, how do we sample, what do we analyze samples for, how do we use results)

## Step 2

- Break into two segment groupings
  - Segments that are simple to characterize due to low initial oiling and the likelihood of limited residual oil remaining
  - Segments that contain relatively higher degrees of initial oiling or have the potential for greater residual oil remaining (e.g., marshes)

## Step 3

- Evaluate simple segments prior to first year anniversary date (April 27, 2004)
- Evaluate more complex segments after first year anniversary date

# Simple Segment Sampling and Partial RAO Evaluation Plan

- Approach
  - Evaluate Level of Risk at Segments categorized as light and very light degrees of oiling and moderately oiled beach segments
  - Sample representative cross section of segments with analysis of sand substrate for petroleum chemicals
  - Compare petroleum chemical concentrations to generic risk-based standards
  - If below standards and condition of No Significant Risk exists submit Partial RAO for group of segments

# Simple Segment RAO Sampling Plan

- Segments selected for sampling based on greatest degree of oiling and distribution within communities
- Sampling areas within a segment based on:
  - Greatest degree of oiling
  - Other areas to improve spatial distribution
- Sampling Locations
  - Upper and lower intertidal zones (some middle intertidal samples also collected)

# Simple Segment Risk Evaluation

- Human Health Risk– Compare soil/sediment quality results to MCP Method 1 Standards
- Environmental Risk – Compare soil/sediment quality results to conservative ecological standards

# Simple Segment Risk Evaluation

- Safety Risk – Evaluate threat of physical harm or injury to public
- Public Welfare – Evaluate potential for residual oil to create a condition that would limit public or community use



# Simple Segment Risk Evaluation Results

- 68 segments included in risk evaluation
- Human Health Risk - soil/sediment quality below standards
- Environmental Risk – soil/sediment quality below standards – further evaluating potential risk associated with terrestrial exposure

# Simple Segment Risk Evaluation Results

- Safety Risk - slip hazard not present
- Public Welfare – Conditions not present that would limit public or community use

# Characterization Approach

## More Complex Segments

- Segments include Moderately Oiled (non sandy beaches) and Heavily Oiled segments
- Performed after 1<sup>st</sup> year anniversary date (April 27, 2004)
- Same risk factors
- More comprehensive study
- Performed limited sampling of more complex segments in January to aid in developing CSM and future sampling and characterization plan

# Results

- Soil/Sediment Quality results generally consistent with previous results
- Will be used to develop CSM and future characterization plan

# Upcoming Activities

- Continued Potentially Buried Oil Inspections
  - Next inspection dates – April and after significant storm events between now and April
- Elizabeth Islands Inspections tentatively scheduled for March – weather permitting
- Spring Inspections of previously IRAC-inspected segments where further treatment deemed feasible

# Upcoming Deliverables by April 27, 2004

- Conceptual Site Model Report
- Phase I Initial Site Investigation Report
- Tier Classification
- Phase II CSA Scope of Work

# Public Outreach

- Deliverables presented in Buzzardsbay.org website upon completion
- Town notification of investigation activities
- Public meetings: Next meeting will be scheduled for May 2004