



Buzzards Bay – B120 Oil Release

June 6, 2006

Presenters

- Richard J. Wozmak, P.E., P.H., L.S.P.
 - LSP-of-Record
- NRDA Trustee
 - Frank Csulak - NOAA
- Other Participants
 - Richard Packard - MADEP
 - Dale Young - MAEOEA

Introduction

- Over three years since oil spill
- Initial cleanup removed majority of oil (greater than 95%)

Before/After Comparison



May 2003



August 2005

Before/After Comparison



May 2003



June 2006

Introduction

- Immediate Response Actions (IRA) ongoing to address isolated areas with limited oiling
- 57 of 120 segments achieved regulatory closure (met the standards for Response Action Outcome [RAO]) summer 2004
- Remaining 63 segments are being addressed this year under MCP Comprehensive Response Actions
- Phase II Comprehensive Response Actions are ongoing
- Outcome of Phase II CSA will be
 - RAO for segments with No Significant Risk; or
 - Phase III Remedial Action Plan for remaining segments

Cleanup Progress

- Immediate Response Action
 - Respond to citizen reports of oil
 - Inspections for potential residual oil impacts
 - Additional cleanup (where feasible)

Citizen Reports

- Since last public meeting (June 2005), report of oil only at one segment (Harbor View, Fairhaven)
 - Report of oil summer 2005 and spring 2006
 - Cleanup activities conducted August 2005
 - Reconnaissance May 2006 (oil not observed)

IRA Cleanup Activities Completed Since Last Public Meeting

- Harbor View (Fairhaven)
- Leisure Shores (Mattapoisett)
- Hoppy's Landing (Fairhaven)
- Pope's Beach (Fairhaven)

Additional IRA Activities



Harbor View 2005 Cleanup



Harbor View 2005 Cleanup



Harbor View 2006 Inspection



Note: this is not oil!

Leisure Shores



Leisure Shores (pre-cleanup)



Leisure Shores Summer 2005 cleanup



Leisure Shores Fall 2005

- Post-cleanup inspections found:
 - Small petroleum particles (less than 1/8 inch in diameter) still present in isolated areas, but magnitude and extent greatly reduced
 - Additional inspections in spring 2006
 - Oil particles not detected
 - Will perform inspections in early July 2006

Leisure Shores

Post-cleanup spring 2006



Hoppy's Landing



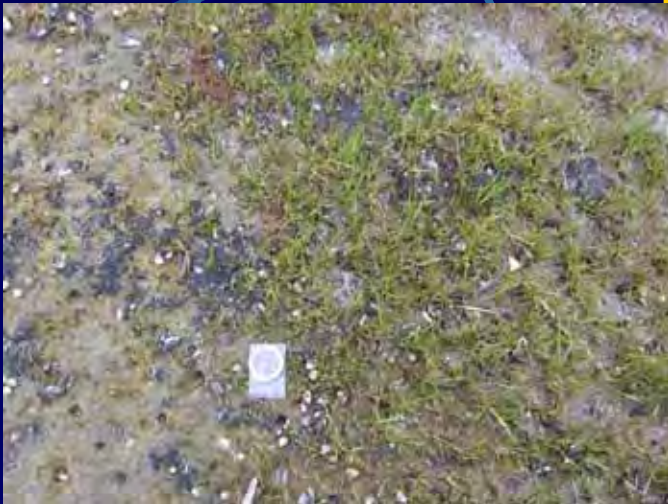
Hoppy's Landing



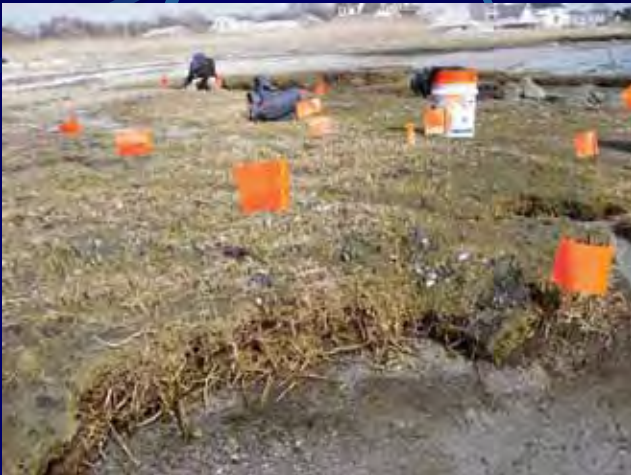
Hoppy's Landing

- December 2005 IRA cleanup conducted
 - Exposing oil underneath rocks
- May 2006 inspection
 - Small splatter and tarballs (typically one inch in diameter or less) still present in limited areas near southern tip (primarily in two areas: 10' x 20' and 10' x 60')
- Additional inspection summer 2006

Pope's Beach Pre-cleanup conditions



Pope's Beach April 2006 Cleanup



Pope's Beach April 2006 Cleanup



IRA Cleanup Summary

- IRA Status Report March 2006
 - Covered period from July to December 2005
- Next IRA Status Report September 2006
 - Will cover period from January to June 2006

Additional IRA Activities

- Evaluating subtidal area offshore of Hoppy's Landing
 - Response to a report of potential increased shellfish mortality
 - Collected shellfish samples in April 2006 for tissue analysis

Additional IRA Activities



Additional IRA Activities

- Analytical results of shellfish samples indicated no B120 oil in shellfish tissue

Upcoming IRA Activities

- Will continue to respond to citizen reports of oil
- Contact GeoInsight at 978-692-1114

Phase II Comprehensive Site Assessment

- Phase II CSA work scope submitted to MADEP for their approval in August 2005
- Work scope consisted of:
 - Intertidal and nearshore subtidal sediment sampling
 - Inspection of segments determined to be representative of “worst-case” conditions

Phase II SOW Objectives

- Evaluate extent and magnitude of residual oil potentially remaining
- Evaluate potential exposure
 - Who/what could be exposed
 - Potential exposure pathways
- Evaluate risk to human health, safety, public welfare, and the environment
- Conclude which segments meet a condition of No Significant Risk

Phase II Data Collection



Phase II Field Inspections



Phase II Shoreline Inspection Summary

- Little to no residual oil present at most of the 63 segments
- The small amounts of residual oil is mostly present as hardened “splatter” (typically dime-size or less) on rock surfaces
- Field teams found and removed a small amount (less than 4 square feet) of “pavement”
- Remaining conditions at Hoppy’s Landing are primarily splatter and tarballs (typically one inch in diameter or less) in marsh sediment and on rocks
- At Leisure Shores the potential exists for small oil particles (less than 1/8 inch in diameter) in sediment

Residual Oil Example

Barney's Joy



Residual Oil Example

Barney's Joy



Residual Oil Example

Barney's Joy



Sediment Sampling Results

- PAH from B120 oil above detection limits but well below health and ecological risk-based standards in samples collected from several areas:
 - Barney's Joy, East of Barbed Wire, Dartmouth
 - Crescent Beach, Mattapoisett
 - Hoppy's Landing, Fairhaven
 - Aucoot Cove, Marion

Phase II Risk Characterization

- Analytical data and site inspection information being incorporated into risk characterization
- Risk characterization focused upon four conditions:
 - Human health
 - Safety
 - Public welfare
 - Environment

Phase II Results

- If there is significant risk in one of these four conditions, additional remedial actions will be evaluated
- If there is No Significant Risk for all four conditions, a partial Response Action Outcome statement will be completed

Upcoming Schedule

- Phase II CSA Report – July 27, 2006
- Phase III RAP (if necessary) – July 27, 2006
- IRA Status and Completion Report – September 2006
- Additional cleanup (if necessary and feasible) – Fall 2006
- Post-cleanup RAO – end of 2006

Closing

- Buzzardsbay.org website
- Once RAO has been submitted for the 63 remaining segments and the subtidal zone, that will complete response actions under the MCP